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     (FILE 'HOME' ENTERED AT 13:03:12 ON 15 OCT 2007)

     FILE 'CAPLUS, MEDLINE' ENTERED AT 13:03:46 ON 15 OCT 2007
L1            34 S FRIEDELIN? (P) LUPENONE?
L2             1 S L1 AND CO2
L3             0 S L1 AND SUPERCRITICAL
L4             1 S L1 AND FLUID?
L5             9 S BAMBOO? (P) SUPERCRITICAL
L6             5 S L5 AND EXTRACT?
L7             3 S L6 AND CO2
L8             2 S L6 NOT L7
L9             4 S L5 NOT L6
L10           34 S L1 NOT L5
L11            0 S L10 AND WT%
L12            0 S L10 AND %
L13            0 S L10 AND %WT
L14            0 S L10 AND PERCENT?
L15            0 S L10 AND WEIGHT?
L16          120 S FRIEDELIN/TI
L17            0 S FRIEDELIN/TI (P) SUPERCRITICAL?
L18            0 S FRIEDELIN/TI (P) CO2
L19            0 S FRIEDELIN/TI AND SUPERCRITICAL?
L20            1 S FRIEDELIN/TI AND CO2
L21            2 S FRIEDELIN/TI AND BAMBOO
L22           40 S FRIEDELIN/TI AND ISOLAT?
L23            0 S FRIEDELIN/TI AND HYPOTENSION?
L24            0 S FRIEDELIN (P) HYPOTENSION?
L25            9 S FRIEDELIN (P) CARCINOMA?
L26            5 S LUPENONE (P) CARCINOMA?
L27            0 S LUPENONE/TI (P) CANCER?
L28            0 S LUPENONE/TI (P) TUMOR?
L29            0 S LUPENONE/TI (P) CARCINOMA?
L30            5 S LUPENONE (P) CARCINOMA?
L31            0 S LUPENONE (P) HYPOTENSION?
L32            0 S FRIEDELIN/TI AND HYPERTENSION?
L33            0 S FRIEDELIN AND HYPERTENSION?
L34            0 S LUPENONE? (P) HYPERTENSION?
L35            0 S FRIEDELIN (P) HYPERTENSION?
L36           23 S TRITERPENOID? (P) HYPERTENSION?
L37            0 S TRITERPENOID? (P) HYPERTENSION? (P) CARCINOMA?
L38          104 S TRITERPENOID? (P) CARCINOMA?
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     (FILE 'HOME' ENTERED AT 13:03:12 ON 15 OCT 2007)

     FILE 'CAPLUS, MEDLINE' ENTERED AT 13:03:46 ON 15 OCT 2007
L1            34 S FRIEDELIN? (P) LUPENONE?
L2             1 S L1 AND CO2
L3             0 S L1 AND SUPERCRITICAL
L4             1 S L1 AND FLUID?
L5             9 S BAMBOO? (P) SUPERCRITICAL
L6             5 S L5 AND EXTRACT?
L7             3 S L6 AND CO2
L8             2 S L6 NOT L7
L9             4 S L5 NOT L6
L10           34 S L1 NOT L5
L11            0 S L10 AND WT%
L12            0 S L10 AND %
L13            0 S L10 AND %WT
L14            0 S L10 AND PERCENT?
L15            0 S L10 AND WEIGHT?
L16          120 S FRIEDELIN/TI
L17            0 S FRIEDELIN/TI (P) SUPERCRITICAL?
L18            0 S FRIEDELIN/TI (P) CO2
L19            0 S FRIEDELIN/TI AND SUPERCRITICAL?
L20            1 S FRIEDELIN/TI AND CO2
L21            2 S FRIEDELIN/TI AND BAMBOO
L22           40 S FRIEDELIN/TI AND ISOLAT?
L23            0 S FRIEDELIN/TI AND HYPOTENSION?
L24            0 S FRIEDELIN (P) HYPOTENSION?
L25            9 S FRIEDELIN (P) CARCINOMA?
L26            5 S LUPENONE (P) CARCINOMA?
L27            0 S LUPENONE/TI (P) CANCER?
L28            0 S LUPENONE/TI (P) TUMOR?
L29            0 S LUPENONE/TI (P) CARCINOMA?
L30            5 S LUPENONE (P) CARCINOMA?
L31            0 S LUPENONE (P) HYPOTENSION?
L32            0 S FRIEDELIN/TI AND HYPERTENSION?
L33            0 S FRIEDELIN AND HYPERTENSION?
L34            0 S LUPENONE? (P) HYPERTENSION?
L35            0 S FRIEDELIN (P) HYPERTENSION?
L36           23 S TRITERPENOID? (P) HYPERTENSION?
L37            0 S TRITERPENOID? (P) HYPERTENSION? (P) CARCINOMA?
L38          104 S TRITERPENOID? (P) CARCINOMA?
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L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:513550 CAPLUS
DOCUMENT NUMBER: 141:76694
TITLE: A composition containing triterpenoid saponins extracted from bamboo, and the preparation method and use thereof
INVENTOR(S): Zhang, Ying; Wu, Xiaoqin; Yu, Zhuoyu; Zhu, Yunlong; Chen, Lingen; Luo, Shenggen
PATENT ASSIGNEE(S): Zhejiang University (Hangzhou) Leaf Bio-Technology Co., Ltd., Peop. Rep. China; Shanghai Yunteng Plant-Extract Science and Technology Development Co., Ltd.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052383	A1	20040624	WO 2003-CN309	20030428
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CN 1506373	A	20040623	CN 2002-154401	20021210
AU 2003231499	A1	20040630	AU 2003-231499	20030428
EP 1576958	A1	20050921	EP 2003-724792	20030428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006512330	T	20060413	JP 2004-557744	20030428
US 2006148733	A1	20060706	US 2005-538463	20051123

PRIORITY APPLN. INFO.:

CN 2002-154401	A	20021210
WO 2003-CN309	W	20030428

AB The present invention relates to an composition containing triterpenoid saponins extracted from Bamboo, and the preparation method and use thereof. The triterpenoid saponins are extracted from various parts of bamboo belonging to Gramineae, such as Bamboo Shavings and the like, using supercrit. CO2 fluid extraction technol. The content of triterpenoid saponins in the composition is 10-90%. The contents of friedelin and lupenone are 5-35% and 1-10% resp. The extract has good anti-free radical, anti-oxidation, antitumor, hypotensive activities and the like. The extract of the present invention can be useful as therapeutic drugs or functional foods for the treatment or prevention of cardiovascular and cerebral vascular diseases, as well as for the treatment of tumor, and useful in cosmetic field.

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:666734 CAPLUS
DOCUMENT NUMBER: 145:434438
TITLE: Method for extracting phytosterol from bamboo shoot with supercritical fluid, and application of the phytosterol extract
INVENTOR(S): Zhang, Ying; Lu, Baiyi; Wu, Xiaoqin; Liang, Yan
PATENT ASSIGNEE(S): Hangzhou Zhejiang University Innoessen Biotechnology Co., Ltd., Peop. Rep. China; Fujian Jianou Yingshi Special Local Product Co., Ltd.
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1796400	A	20060705	CN 2004-10099219	20041229

PRIORITY APPLN. INFO.: CN 2004-10099219 20041229

AB The title phytosterol extract contains total sterols 5-50%, which includes β-sitosterol, stigmasterol and campesterol at a ratio of (10-40):(1-3):(2-5). The phytosterol extract is prepared by extracting bamboo shoot with supercrit. CO2 for 1-5 h under the following conditions: extraction pressure of 15-35 MPa, extraction temperature of 40-70°, separation temperature of 30-50° and separation pressure of 4-8 MPa. The phytosterol extract has anti-inflammatory and leukemia cells proliferation inhibiting effects, and can be used in cosmetics, food products, health products and medicines.

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:411591 CAPLUS
DOCUMENT NUMBER: 140:412292
TITLE: Extraction of antibacterial and/or antioxidant agents from bamboo
INVENTOR(S): Kitein, Armand Tibigin; Moriyoshi, Takashi
PATENT ASSIGNEE(S): Kagawa Industry Support, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004143106	A	20040520	JP 2002-311104	20021025

PRIORITY APPLN. INFO.: JP 2002-311104 20021025

AB Title agents are obtained from dried bamboo powder by supercrit. extraction Thus, dried bamboo powder was extracted with supercrit. CO2 to give ethoxyquin, sesquiterpene, and cyclohexanone derivative

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:45451 CAPLUS
DOCUMENT NUMBER: 140:253239
TITLE: Isolation of Antimicrobials and Antioxidants from Moso-Bamboo (Phyllostachys Heterocycla) by Supercritical CO2 Extraction and Subsequent Hydrothermal Treatment of the Residues
AUTHOR(S): Quitain, Armando T.; Katoh, Shunsaku; Moriyoshi,

Takashi
CORPORATE SOURCE: Research Institute for Solvothermal Technology, Takamatsu, Kagawa, 761-0301, Japan
SOURCE: Industrial & Engineering Chemistry Research (2004), 43(4), 1056-1060
CODEN: IECRED; ISSN: 0888-5885
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Supercrit. CO2 with or without EtOH (as the cosolvent) was used to isolate antimicrobials and antioxidants from moso-bamboo (Phyllostachys heterocycla). The exts. contained three predominant EtOH-soluble compds. identified by gas chromatog.-mass spectrometry as an ethoxyquin, a sesquiterpene, and a cyclohexanone derivative The optimum extraction temperature for the three compds. was 60° at a pressure of 20 MPa. The EtOH-insol. compds. consisted of mostly paraffins or waxes. Hydrothermal treatment of extraction residues produced hydroquinone and benzoquinone. Hydroxycinnamic acid, a known antioxidant, was also obtained by microwave pyrolysis of extraction residues.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:850294 CAPLUS
DOCUMENT NUMBER: 145:255542
TITLE: Cosmetic composition containing nanoliposome which contains bamboo sap extract obtained by supercritical fluid extraction and lactic acid bacteria fermented solution for prevention of skin-aging and improvement of acne
INVENTOR(S): Choi, Gun Ho; Choi, Jang Woo; Lee, Seung Hwa
PATENT ASSIGNEE(S): Nadri Cosmetics Co., Ltd., S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2005010447	A	20050127	KR 2003-49711	20030721
PRIORITY APPLN. INFO.:			KR 2003-49711	20030721

AB Provided is a cosmetic composition containing the nanoliposome which contains the bamboo sap extract obtained by supercrit. fluid extraction and lactic acid bacteria fermented solution Therefore, the composition prevent of skin-aging and improves acne by increasing skin elasticity and moisturization. The cosmetic composition is characterized by containing, based on the total weight of the composition, 0.5-30.0% of the nanoliposome which contains bamboo sap extract using supercrit. fluid extraction and lactic acid bacteria fermented solution for prevention of skin-aging and improvement of acne. The lactic acid bacteria include bifidobacteria longum, lactobacillus casei, lactobacillus acidophilus and streptococcus thermophilus.

L8 ANSWER 2 OF 2 MEDLINE on STN
ACCESSION NUMBER: 2006574794 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16886233
TITLE: Anti-fatigue activity of a triterpenoid-rich extract from Chinese bamboo shavings (Caulis bamfusae in taeniam).
AUTHOR: Zhang Yu; Yao Xiaobao; Bao Bili; Zhang Ying
CORPORATE SOURCE: Department of Food Science and Nutrition, College of Biosystems Engineering and Food Science, Zhejiang University, Hangzhou 310029, Zhejiang Province, PR China.. y_zhang@zju.edu.cn
SOURCE: Phytotherapy research : PTR, (2006 Oct) Vol. 20, No. 10, pp. 872-6.
Journal code: 8904486. ISSN: 0951-418X.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200701
ENTRY DATE: Entered STN: 28 Sep 2006
Last Updated on STN: 4 Jan 2007
Entered Medline: 3 Jan 2007

AB The anti-fatigue activity of a pentacyclic triterpenoid extract from bamboo shavings (EBS) from the bark of bamboo (Bambusa tuldoides Munro), was evaluated in BALB/c mice. EBS, isolated by

the supercritical CO(2) fluid extraction (SFE)
technique, was given to mice at concentrations of 0.04 (low-dose group), 0.08 (middle-dose group) and 0.25 g/kg body weight (high-dose group). The anti-fatigue activity of EBS was estimated by the change in body weight, weight-loaded swimming test and climbing test, and corresponding parameters including serum urea nitrogen, hepatic glycogen and blood lactic acid were measured. The results showed that an appropriate level of EBS could prolong the weight-loaded swimming and climbing time, and had an active effect on the serum urea nitrogen, hepatic glycogen and blood lactic acid level in BALB/c mice, which significantly embodied the anti-fatigue activity of EBS. Overall, it is predicted that EBS, being a composition mainly containing a group of pentacyclic triterpenoids, and its main triterpenoid components have great potential for application in relevant fields for its anti-fatigue activity.

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:1068352 CAPLUS
TITLE: Synthesis of biomorphological mesoporous TiO2 templated by mimicking bamboo membrane in supercritical CO2
AUTHOR(S): Li, Jinhong; Shi, Xiaoying; Wang, Lijuan; Liu, Fei
CORPORATE SOURCE: State Key Laboratory of Geological Processes and Mineral Resources, China University of Geosciences, Beijing, 100083, Peop. Rep. China
SOURCE: Journal of Colloid and Interface Science (2007), 315(1), 230-236
CODEN: JCISA5; ISSN: 0021-9797
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new approach is presented for preparing biomorphol. mesoporous TiO2 templated by mimicking bamboo inner shell membrane via supercrit. CO2 (SCCO2) transportation through titanium tetrabutyloxide (TTBO). The anal. of wide-angle X-ray powder diffraction (XRD) showed the prepared TiO2 in phase of anatase, and the small-angle XRD revealed the presence of mesopores without periodicity. The product exhibited the shape of crinkled films and extended in two dimensions up to centimeters. The electron microscopic observation showed that the TiO2 films were around 200 nm in thickness, and across the films there were numerous round or ellipse-shaped mesopores, being 10-50 nm in diameter, which were formed by the close packing of TiO2 particles. High-resolution transmission electron microscope (HRTEM) displayed that the single TiO2 particle size was about 12.5 nm. The UV-vis absorption spectrum was transparent in the wavelength of 320-350 nm for suspensions of the prepared mesoporous TiO2 in ethanol at the concentration of 5.0 mg/l. The mesoporous TiO2 prepared with the aid of SCCO2 exhibited an obvious blue shift compared with the TiO2 prepared by sol-gel infiltration. The possible mechanism for the formation of the mesoporous TiO2 is summarized into a biomimetic mineralization pathway. First, TTBO was transported to the membrane surface via SCCO2, and then condensed. Hydrolysis reactions between the functional groups of organic membrane and TTBO took place to form the nuclear TiO2, and the TiO2 seeds grew around the organic membrane into TiO2 mesoporous materials. The approach provides a low-cost and efficient route for the production of ceramics nanomaterials with unique structural features, which may have potential application in designing UV-selective shielding devices.

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:886322 CAPLUS
TITLE: Bamboo is a suitable substrate for polymerizations when swollen with supercritical CO2
AUTHOR(S): Eastman, Scott A.; Lesser, Alan J.; McCarthy, Thomas J.
CORPORATE SOURCE: Department of Polymer Science and Engineering, University of Massachusetts, Amherst, Amherst, MA, 01072, USA
SOURCE: Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007 (2007), PMSE-508. American Chemical Society: Washington, D. C.
CODEN: 69JNR2
DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English
AB Bamboo composites were infused with a number of silicone reagents as well as cyclooctadiene and dicyclopentadiene monomers with the assistance of supercrit. CO2. These additives were then polymerized and crosslinked insitu to obtain unique natural composites. Bending stiffness and energy release

rate were measured and compared with unmodified bamboo. Fire resistance properties were also measured to determine if the composites differed in total heat release and char yield. It was found that the silicone additives tend to increase the bending modulus, energy release rate, and fire resistance slightly. Bamboo-poly(alkenamer) composites showed an increase in bending modulus and energy release rate; however, the fire resistance properties were not affected.

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:854956 CAPLUS
TITLE: Bamboo is a suitable substrate for polymerizations when swollen with supercritical CO2
AUTHOR(S): Eastman, Scott A.; Lesser, Alan J.; McCarthy, Thomas J.
CORPORATE SOURCE: Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA, 01002, USA
SOURCE: PMSE Preprints (2007), 97, 897-899
CODEN: PPMRA9; ISSN: 1550-6703
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
AB Unavailable
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:671295 CAPLUS
DOCUMENT NUMBER: 139:199799
TITLE: Method for hydrolysis treatment of biomass including bamboo and wood with shock collision by using sub-critical or super-critical fluid
INVENTOR(S): Ito, Shigeru
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238969	A	20030827	JP 2002-41980	20020219
PRIORITY APPLN. INFO.:			JP 2002-41980	20020219

AB The method is carried out by pretreatment of the biomass with applying the shock wave on the biomass to selectively destroy the blocked pore edge-wall and cell membrane, or pulverization to be micro chips, then impregnating the resulting biomass in the fluid (e.g., alc., water, CO2) under sub-critical or super-critical conditions for readily hydrolysis treatment
to recover valuable chems. from the biomass.

L10 ANSWER 24 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:544551 CAPLUS
DOCUMENT NUMBER: 83:144551
TITLE: Indian medicinal plants. XXXIV. Triterpenes from Grewia asiatica
AUTHOR(S): Chattopadhyay, Subhagata; Pakrashi, S. C.
CORPORATE SOURCE: Dep. Med. Chem., Indian Inst. Exp. Med., Calcutta, India
SOURCE: Journal of the Indian Chemical Society (1975), 52(6), 553
CODEN: JICSAH; ISSN: 0019-4522
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The stem-bark of G. asiatica was successively extracted in a Soxhlet apparatus with petroleum ether, C6H6, and CH2Cl2. From the petroleum ether extract was isolated lupeol and betulin. From the petroleum ether and C6H6 extract was isolated lupenone and friedelin. The compds. were identified by phys. and chemical properties.

L10 ANSWER 25 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:455701 CAPLUS
DOCUMENT NUMBER: 83:55701
TITLE: Triterpenoids from ten Lithocarpus species of Hong Kong
AUTHOR(S): Hui, Wai-Haan; Ko, Phyllis D. S.; Lee, Yuk-Chun; Li, Man-Moon; Arthur, Henry R.
CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong
SOURCE: Phytochemistry (Elsevier) (1975), 14(4), 1063-6
CODEN: PYTCAS; ISSN: 0031-9422
DOCUMENT TYPE: Journal
LANGUAGE: English
AB From the petrol exts. of the leaves and stems of 10 Lithocarpus species (L. attenuata, L. cornea, L. elizabethae, L. glabra, L. haipinii, L. hancei, L. harlandi, L. irwinii, L. litchioides, and L. polystachya) of the Fagaceae family, were isolated 23 different triterpenoids, and sitosterol and stigmasterol. Of the triterpenoids, 11 belonged to the oleanane and rearranged oleanane group [β-amyrin, friedelin , friedelan-3β-ol, glutinol, taraxerone, taraxerol, and its acetate, canophyllol (28-hydroxyfriedelan-3-one), friedelan-2,3-dione (3-hydroxyfriedel-3-en-2-one), pachysandiol A (2α,3β-dihydroxyfriedelane) and a new compound lithocarpic lactone C30H5002]. Four compds. were from the lupane and rearranged lupane group (lupenone , lupeol, betulin, and taraxasterol), 2 from the hopane group (22-hydroxyhopan-3-one and 3β,22-dihydroxyhopane), and 6 were probably new compds.

L10 ANSWER 26 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:175161 CAPLUS
DOCUMENT NUMBER: 82:175161
TITLE: Chemical components of Avicennia officinalis
AUTHOR(S): Subramanian, S. Sankara; Vedantham, T. N. C.
CORPORATE SOURCE: Dep. Chem., Jawaharlal Inst. Postgrad. Med. Educ. Res., Pondicherry, India
SOURCE: Indian Journal of Pharmacy (1974), 36(4), 105-6
CODEN: IJPAAO; ISSN: 0019-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aerial parts of A. officinalis were extracted with CHCl3 followed by 80% EtOH. Chromatog. of the extract on neutral alumina and elution with light petroleum yielded lupenone [1617-70-5], m. 165-6°, identified by comparison with an authentic sample. Light petroleum-benzene (9:1) fractions gave friedelin [559-74-0], m.

257-9°. Further elution with 1:1 light petroleum-benzene yielded lupeol [545-47-1],m. 208-10° and β-sitoserol [83-46-5], m. 132-3°. Elution with 98:2 $CHCl_3$-MeOH gave betulinic acid [472-15-1], m. > 280°, identified as the Me ester m. 220-1°, acetate m. > 280°, and Me ester acetate m. 198-200°; and ursolic acid [77-52-1], m. > 280°, identified by preparation of its Me ester and Me ester acetate.

L10 ANSWER 27 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:1995 CAPLUS
DOCUMENT NUMBER: 78:1995
TITLE: Constituents of pollen. 1. Constituents of Quercus acutissima. 1
AUTHOR(S): Ohmoto, Taichi; Nikaido, Tamotsu; Ikuse, Masa
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan
SOURCE: Shoyakugaku Zasshi (1972), 26(1), 36-40
CODEN: SHZAAY; ISSN: 0037-4377
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Pollen of Q. actissima was crushed ultrasonically and its constituents were studied. Stearic, palmitic, and oleic acids; friedelin; β-amyrenone; lupenone; β-sitosterol; campesterol; glycerin; and araban were identified. Eighteen amino acids and citric, malonic, and malic acids were determined

L10 ANSWER 28 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:458778 CAPLUS
DOCUMENT NUMBER: 77:58778
TITLE: Chemistry of Brazilian Guttiferae. XXVIII. Xanthones from Caraipa densiflora
AUTHOR(S): Alves De Lima, R.; Gottlieb, O. R.; Mesquita, A. A. Lins
CORPORATE SOURCE: Esc. Pos-Graduacao, Univ. Fed. Rural Rio de Janeiro, Rio de Janeiro, Brazil
SOURCE: Phytochemistry (Elsevier) (1972), 11(7), 2307-9
CODEN: PYTCAS; ISSN: 0031-9422
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The trunk wood of C. grandifolia contains sitosterol, lupeol, lupenone, betulinic acid, and vanillin. The trunk wood of C. densiflora contains sitosterol, lupeol, friedelin, betulinic acid, vanillin, 1,6-dihydroxy-7,8-methylene-dioxyxanthone, and 1,5-dihydroxy-6,7-dimethoxyxanthone.

L10 ANSWER 29 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1970:705 CAPLUS
DOCUMENT NUMBER: 72:705
ORIGINAL REFERENCE NO.: 72:119a,122a
TITLE: New Zealand phytochemical survey. VII. Constituents of some dicotyledons
AUTHOR(S): Cambie, Richard C.; Parnell, J. C.
CORPORATE SOURCE: Univ. Auckland, Auckland, N. Z.
SOURCE: New Zealand Journal of Science (1969), 12(3), 453-66
CODEN: NZJSAB; ISSN: 0028-8365
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The leaves of Olearia paniculata were found to contain the triterpenes, friedelin, lupenone, and lupenyl acetate, and a small amount of a triterpene diol, tentatively identified as sophoradiol. Friedelin was also isolated from the roots of O. paniculata, while epifriedelinol, lupeol, lupenyl acetate and β-sitosterol were provisionally identified in the exts. by thin-layer chromatog. (TLC). The wood of Corokia buddleioides was found to contain taraxerol and β-sitosterol. Two further triterpenes isolated were identified as

lupeol and lupenyl acetate. Lupeol was also the major triterpene isolated from the aerial portions of Gaultheria paniculata while β-sitosterol was also isolated from the extract Friedelin, β-sitosterol, and ellagic acid were isolated from the wood of Elaeocarpus hookerianus. An extract of the wood of Planchonella novo-zelandica contained lupeol, α-amyrin, α-amyrinyl acetate, α-spinasterol, stigmasterol, and campesterol. The wood of Homalanthus polyandrus contained a small amount of an unidentified triterpene ketone, C30H48O, isomeric with and similar to taraxerone and lupenone, but differing in its behavior on TLC. β-Sitosterol was also isolated from the extract The leaves of Alseuosmia macrophylla contained lupeol, lupenyl acetate, and stigmasterol as principal constituents of a mixture of aliphatic acids and stearic acid. They also contained at least 3 triterpene acetates which have not been characterized. β-Sitosterol and traces of unidentified triterpenes were isolated from an ether extract of the wood of Nothofagus solandri. Large amts. of D-mannitol were obtained from the wood of Myoporum laetum. Alkaloids were present in the leaves and β-sitosterol was identified in the wood and bark. D-Mannitol was the major compound isolated from the wood of Hebe salicifolia. β-Sitosterol was the only compound readily identified in exts. of wood of Aciphylla colensoi, the aerial parts of Clematis hookeriana, and the wood of Senecio elaeagnifolius. β-Sitosterol and leucoanthocyanidin were the only extractives identified in the wood of Knightia excelsa. Stigmasterol and β-sitosterol were the principal sterols found in the bark and wood of Pseudopanax crassifolium. Mixts. of stigmasterol and β-sitosterol were also found in the leaves and wood of the related species Neopanax laetum and the woods of N. arboreum, N. colensoi, N. simplex, and N. simplex var sinclairii. The principal constituent of a mixture of aliphatic alcs. in the leaves of N. laetum was identified as triacontan-1-ol. The barks of Pittosporum colensoi and P. eugenioides also contained stigmasterol and β-sitosterol.

L10 ANSWER 30 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:488461 CAPLUS
DOCUMENT NUMBER: 71:88461
ORIGINAL REFERENCE NO.: 71:16437a,16440a
TITLE: Triterpenoids and related compounds from gramineae plants. V
AUTHOR(S): Ohmoto, Taichi
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan
SOURCE: Yakugaku Zasshi (1969), 89(6), 814-20
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Triterpenoids in Paspalum dilatatum, Hemarthrica sibirica, Miscanthus sacchariflorus, M. sinensis, Saccharum spontaneum var arenicola, Coix lacryma-jobi, and Zea mays were examined from a chemotaxonomic point of view. Lupeol Me ether, m. 250-1°, [α]D23 35.6° (CHCl3) was isolated from culms and leaves of P. dilatatum and identified with a specimen prepared by methylation of lupeol. Other constituents were β-amyrin, its Me ether, α-amyrin Me ether, campesterol, crusgallin, cylindrin, ferneol, friedelin, glutinol, glutinone, isoarborinol, lupeol, miliacin, β-sitosterol, stigmasterol, and taraxerol. Triterpenoids of Zoysia matrella were reinvestigated and fernenone, m. 206-7°, [α]D23 -39.4°, and 12-ketoarundoin, m. 291°, [α]D23 -5.2°, were identified for the first time from natural sources. Arundoin and lupenone were obtained from Cynodon dactylon and Phyllostachys heterocycla var pubescens, resp.

L10 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:481570 CAPLUS
DOCUMENT NUMBER: 71:81570
ORIGINAL REFERENCE NO.: 71:15153a,15156a

TITLE: Examination of the Euphorbiaceae of Hong Kong. VI. Isolation and structure of glochidonol, a new triterpene ketol from Glochidion wrightii
AUTHOR(S): Hui, Wai Haan; Fung, M. L.
CORPORATE SOURCE: Univ. Hong Kong, Hong Kong
SOURCE: Journal of the Chemical Society [Section] C: Organic (1969), (13), 1710-12
CODEN: JSOOAX; ISSN: 0022-4952
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Glochidonol, isolated from the stems of G. wrightii was shown to be 1β-hydroxylup-20(29)-en-3-one (I) by chemical and N.M.R. spectroscopic evidence. The mass spectrum of glochidonyl acetate is discussed. Other compds. obtained from both the leaves and stems of the same plant are friedelin, glochidone, friedelan-3β-ol, β-sitosterol, and glochidiol. Lupenone and lupeol are also found in the stems.

L10 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1968:47008 CAPLUS
DOCUMENT NUMBER: 68:47008
ORIGINAL REFERENCE NO.: 68:9079a,9082a
TITLE: Triterpenes from some New Zealand dicotyledons
AUTHOR(S): Briggs, Lindsay H.; Cambie, Richard C.; Couch, R. A. F.
CORPORATE SOURCE: Univ. Auckland, Auckland, N. Z.
SOURCE: New Zealand Journal of Science (1967), 10(4), 1076-82
CODEN: NZJSAB; ISSN: 0028-8365
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This detailed study of New Zealand dicotyledons was made to isolate and identify the triterpenes which occur in them. In all cases, these were isolated by chromatog. of ether-soluble fractions on alumina for neutral compounds or on silica gel for acids. Identification of the compds. was made by direct comparison with authentic samples or by conversion to derivs. Friedelin, epifriedinol, and β-sitosterol were identified in the bark of Alectryon excelsum; lupenone, lupeol, and lupenyl acetate in the leaves and tataxerol, teraxeryl acetate, and taraxerone in the bark of Dracophyllum recurvum; lupeol in the bark of Carpodetus serratus; taraxerol and β-sitosterol in the wood of Corokia buddleioides; ursolic acid in the leaves of Ixerba brexioides; and β-sitosterol and a leucoanthocyanin in the bark of Knightia excelsa.

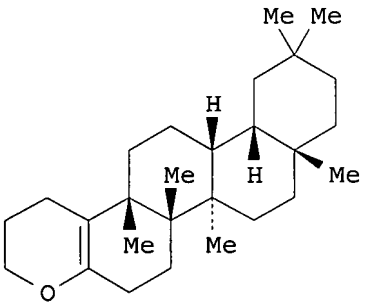
L10 ANSWER 33 OF 34 MEDLINE on STN
ACCESSION NUMBER: 2001068765 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10923844
TITLE: A novel agarofuran sesquiterpene, celahin D from Celastrus hindsii Benth.
AUTHOR: Huang H C; Shen C C; Chen C F; Wu Y C; Ku Y H
CORPORATE SOURCE: Graduate Institute of Natural Products, Kaohsiung Medical College, Taiwan, ROC.
SOURCE: Chemical & pharmaceutical bulletin, (2000 Jul) Vol. 48, No. 7, pp. 1079-80.
Journal code: 0377775. ISSN: 0009-2363.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ENTRY DATE: Entered STN: 22 Mar 2001
Last Updated on STN: 22 Mar 2001
Entered Medline: 4 Jan 2001

AB A novel agarofuran sesquiterpene polyol ester, 1beta,2beta,6alpha,15beta-tetracetoxy-8 beta,9alpha-dibenzoyloxy-beta- dihydroagarofuran (celahin D) (1), two known analogues of 1,1beta-acetoxy-8beta,9alpha-dibenzoyloxy-4alpha6alpha-dihydroxy-2beta(alphamethylbutanoyloxy)-beta-++ +dihydroagarofuran (2) and beta-acetoxy-8beta,9alpha-dibenzoyloxy-6alpha-hy droxy-2beta(alpha -methylbutanoyloxy)-beta-dihydroagarofuran (3), and a known cytotoxic sesquiterpene pyridine alkaloid, emarginatine E (4) were isolated from the stems of Celastrus hindsii Benth. Three known triterpenes, loranthol (5), lupenone (6) and friedelinol (7) were also obtained from the titled plant. Structural elucidation of compound 1 was established by 2D NMR spectra.

L10 ANSWER 34 OF 34 MEDLINE on STN
ACCESSION NUMBER: 2000113513 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10647216
TITLE: Pentacyclic triterpenes from Chuquiraga ulicina.
AUTHOR: Flagg M L; Valcic S; Montenegro G; Gomez M; Timmermann B N
CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of Pharmacy, University of Arizona, Tucson 85721, USA.
CONTRACT NUMBER: ES06694 (NIEHS)
T37TW00036 (FIC)
U01 TW00316-06 (FIC)
SOURCE: Phytochemistry, (1999 Dec) Vol. 52, No. 7, pp. 1345-50.
Journal code: 0151434. ISSN: 0031-9422.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ENTRY DATE: Entered STN: 9 Mar 2000
Last Updated on STN: 9 Mar 2000
Entered Medline: 23 Feb 2000

AB Four taraxastane triterpenes, 3 beta-acetoxy-6 beta-hydroxytaraxasta-20-ene, 6 beta-hydroxytaraxasta-20-en-3-one, 6 beta-hydroxytaraxasta-20-ene 3 beta-palmitate and 3 beta,6 beta-dihydroxytaraxasta-20-ene were isolated from the dichloromethane-methanol extract of Chuquiraga ulicina ssp. ulicina together with the known triterpenes lupeol, lupenyl acetate, lupenone, friedelinol, 3 beta-acetoxy-30-nor-lupan-20-one, and 30-nor-lupan-3 beta-ol-20-one.

0 ANSWER 14 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:450410 CAPLUS
DOCUMENT NUMBER: 127:188193
TITLE: Gracilipene: a heterocyclic seco-trisnor-oleanane from Calophyllum gracilipes (Guttiferae)
AUTHOR(S): Cao, Shu-Geng; Sim, Keng-Yeow; Goh, Swee-Hock; Xue, Feng; Mak, Thomas C. W.
CORPORATE SOURCE: Department Chemistry, National University Singapore, 119260, Singapore
SOURCE: Tetrahedron Letters (1997), 38(27), 4783-4786
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Gracilipene (I), a novel heterocyclic trisnor-triterpene from the leaves of Calophyllum gracilipes, shows an unprecedented rearranged seco-trisnor-oleanane structure with a dihydropyran ring-A, a determined by NMR spectra and single crystal X-ray anal. Other known triterpenes isolated include friedelin, lupeol, lupenone, β-sitosterol, stigmasterol, 3β-hydroxy-30-norlupan-20-one, lupane-3β,20-diol, (20R)-3β-hydroxylupan-29-oic acid, betulinic acid and squalene.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:453161 CAPLUS
DOCUMENT NUMBER: 122:235234
TITLE: Isolation of constituents from the leaves of Syzygium tripinnatum
AUTHOR(S): Tsai, Ian-Lih; Sheen, Wine-Show; Chen, Jih-Jung; Chen, Ih-Sheng
CORPORATE SOURCE: School of Pharmacy, Kaohsiung Medical College, Kaohsiung, Taiwan
SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan) (1994), 46(5), 401-12
CODEN: CPHJEP; ISSN: 1016-1015
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Six triterpenoids (friedelin, lupenone, lupeol, lupenyl palmitate, obtusalin and cycloartenyl stearate) and 3 steroids (stigmast-4-en-3-one, β-sitosterol and β-sitosteryl stearate) were isolated from the CHCl3 soluble fraction of the leaves of S. tripinnatum. The structures of these compds. were verified by chemical and spectroscopic methods.

L10 ANSWER 16 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:184598 CAPLUS
DOCUMENT NUMBER: 122:76535
TITLE: Foliar lipids. III. Triterpenic ketones.
AUTHOR(S): Debal, A.; Mallet, J.-F.; Ucciani, E.; Doumenq, P.; Gamisans, J.
CORPORATE SOURCE: Faculte des Sciences et Techniques, Marseille, 13397, Fr.
SOURCE: Revue Francaise des Corps Gras (1994), 41(5-6), 113-18
CODEN: RFCGAE; ISSN: 0035-3000
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Hexane exts. of plant leaves (HEPL) of 16 species have been investigated for their triterpenic ketone content. Five pentacyclic ketones have been identified by GC/IR-FT and GC-MS, i.e. arborinone, taraxerone, lupenone, friedelin and β-amyrenone. A sixth one could not be identified. Two species represented interesting sources: Ruscus aculeatus (12.5% lupenone/HEPL) and Senecio bicolor (8.1 % β-amyrinone/HEPL).

L10 ANSWER 17 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:442514 CAPLUS
DOCUMENT NUMBER: 121:42514
TITLE: Chemical components of of Daguoyoumateng (Mucuna macrocarpa)
AUTHOR(S): Hu, Wangyun; Luo, Shide; Cai, Jianxun
CORPORATE SOURCE: Kunming Inst. Bot., Chin. Acad. Sci., Kunming, 650223, Peop. Rep. China
SOURCE: Zhongcaoyao (1994), 25(2), 59-60,63
CODEN: CTYAD8; ISSN: 0253-2670
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Lupenone, friedelin, Δ5,22-stigmastadien-3β-ol, 2,3-dihydroxypropyl tetracosanoate, 2,3-dihydroxypropyl pentacosanoate, and 2,3-dihydroxypropyl hexacosanoate were isolated from Daguoyoumateng (Mucuna macrocarpa stem) and identified by chemical and spectrochem. methods. 2,3-Dihydroxypropyl pentacosanoate was a novel comod.

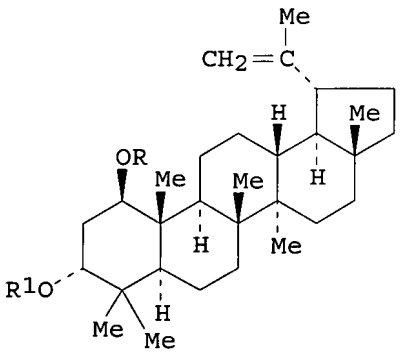
L10 ANSWER 18 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:240087 CAPLUS
DOCUMENT NUMBER: 120:240087
TITLE: Constituents of Clusia fluminensis
AUTHOR(S): Nagem, Tanus J.; Mesquita, Antonio A. L.; Silva, Rosalice
CORPORATE SOURCE: Dep. Chem., Univ. Minas Gerais, Belo Horizonte, 30161, Brazil
SOURCE: Fitoterapia (1993), 64, 380
CODEN: FTRPAE; ISSN: 0367-326X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The leaves of Clusia fluminensis yielded tricosane, lupenone, friedelin, α- and β- friedelinol, amyrin, octacosanol, and β-sitosterol.

L10 ANSWER 19 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:155281 CAPLUS
DOCUMENT NUMBER: 112:155281
TITLE: The constituents from petroleum ether fraction of the stem bark of Premna fulva Craib
AUTHOR(S): Zeng, Quan; Liu, Chengji; Liu, Ligen
CORPORATE SOURCE: Dep. Tradit. Chin. Med., China Pharm. Univ., Nanjing, Peop. Rep. China

SOURCE: Zhongguo Yaoke Daxue Xuebao (1989), 20(2), 94-6
CODEN: ZHYXE9; ISSN: 1000-5048
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The following compds. were isolated in crystal form from the petroleum ether fraction from P. fulva stem bark: friedelin, friedelan-3β-ol, β-sitosterol, and lupen-3-one. The compds. were identified by chemical and spectroscopic anal. Lupene-3-one was isolated and identified from the Premma genus (Verbenaceae) for the first time.

L10 ANSWER 20 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:181424 CAPLUS
DOCUMENT NUMBER: 92:181424
TITLE: Photochemical or photomimetic fossil triterpenoids in sediments and petroleum
AUTHOR(S): Corbet, B.; Albrecht, P.; Ourisson, G.
CORPORATE SOURCE: Inst. Chim., Univ. Louis Pasteur, Strasbourg, 67 008, Fr.
SOURCE: Journal of the American Chemical Society (1980), 102(3), 1171-3
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Eighteen fossil triterpneoids, including friedelin, α- and β-amyrenone, lupenone, lupanone and related ring-opened derivs., were isolated from the sediments in the delta of the Mahakam river (Indonesia) and some photochem. mechanisms were postulated for their formation.

L10 ANSWER 21 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:117763 CAPLUS
DOCUMENT NUMBER: 88:117763
TITLE: An examination of the Euphorbiacace of Hong Kong. Part 16. Triterpenoids from Glochidion macrophyllum and G. puberum
AUTHOR(S): Hui, Wai-Haan; Li, Man-Moon
CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong
SOURCE: Phytochemistry (Elsevier) (1978), 17(1), 156-7
CODEN: PYTCAS; ISSN: 0031-9422
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



IV, R=H, R1=Ac
V, R=Ac, R1=H

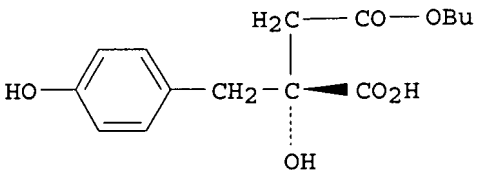
AB G. macrophyllum yielded Me betulinate and glochilocudiol. G. puberum leaves yielded friedelin (I), friedelan-3β-ol (II), lupeol,

lup-20(29)-ene-1,3-dione, and sitosterol (III), and the stems I, II, III, lupenone, glochidone, lup-20(29)-en-1β-ol-3α-yl acetate (IV), lup-20(29)-en-3α-ol-1β-yl acetate (V), glochidonol, glochidiol, and lup-20(29)-ene-1β,3β-diol.

L10 ANSWER 22 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:117668 CAPLUS
DOCUMENT NUMBER: 86:117668
TITLE: Chemical constituents of the flowers and leaves of Notonia grandiflora
AUTHOR(S): Kotaiah, Y.; Lakshmi, N. K. M.; Rao, E. Venkata; Rao, D. Venkata
CORPORATE SOURCE: Dep. Pharm. Sci., Andhra Univ., Waltair, India
SOURCE: Indian Journal of Pharmacy (1976), 38(5), 130-1
CODEN: IJPAAO; ISSN: 0019-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two flavonoids were isolated from the flowers of N. grandiflora and identified as kaempferitrin and kaempferol 7-O-rhamnoside. Friedelin and lupenone were isolated from the leaves.

L10 ANSWER 23 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:552246 CAPLUS
DOCUMENT NUMBER: 83:152246
TITLE: Triterpenoids and the related compounds from gramineae plants. X
AUTHOR(S): Ohmoto, Taichi; Uzawa, Sumiko; Tanaka, Ryuji
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan
SOURCE: Shoyakugaku Zasshi (1974), 28(1), 1-6
CODEN: SHZAAY; ISSN: 0037-4377
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI For diagram(s), see printed CA Issue.
AB Fourteen triterpenoids and related compds. were isolated from Arundinarieae and identified to be β-amyrin (I) [559-70-6], fernenol [4966-00-1], fernenone [6090-29-5], arundoin [4555-56-0], cylindrin [17904-55-1], epifriedelinol [16844-71-6], friedelin [559-74-0], germanicol [465-02-1], miliacin [5945-45-9], glutinol [545-24-4], glutinone [508-09-8], lupeol [545-47-1], lupenone [1617-70-5] and taraxerol [127-22-0].

L10 ANSWER 7 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:344677 CAPLUS
DOCUMENT NUMBER: 137:166182
TITLE: Two new phenolic carboxylic acid esters from Opuntia vulgaris
AUTHOR(S): Jiang, Jianqin; Ye, Wencai; Chen, Zhen; Lou, Fengchang; Min, Zhida
CORPORATE SOURCE: Department of Phytochemistry, China Pharmaceutical University, Nanjing, 210038, Peop. Rep. China
SOURCE: Journal of Chinese Pharmaceutical Sciences (2002), 11(1), 1-3
CODEN: JCHSE4; ISSN: 1003-1057
PUBLISHER: Beijing Medical University, School of Pharmaceutical Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Two new phenolic carboxylic acid esters Bu eucomate (e.g. I) and Me eucomate and six known compds. eucomic acid, 3-β-acetyl-taraxerol, friedelin, lupenone, Me linoleate and Me oleate were isolated from the stems of Opuntia vulgaris Mill(Cactaceae). Their structures were determined on the basis of spectral methods. All known compds. except friedelin were isolated for the first time from this plant.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:146761 CAPLUS
DOCUMENT NUMBER: 137:30534
TITLE: Sesquiterpene polyol esters and triterpenes from Celastrus punctatus
AUTHOR(S): Kuo, Yao-Haur; Li, Shyh-Yuan; Shen, Ya-Chin; Huang, Hui-Chi; Hsu, Ya-Wen; Tseng, Rong-Jeng; Ou, Jun-Chih; Chen, Chieh-Fu
CORPORATE SOURCE: National Research Institute of Chinese Medicine, Taipei, 112, Taiwan
SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan) (2001), 53(5), 257-268
CODEN: CPHJEP; ISSN: 1016-1015
PUBLISHER: Pharmaceutical Society of Republic of China
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Five sesquiterpene polyol esters with β-dihydroagarofuran including 1β-acetoxy-8β,9α-dibenzoyloxy-6α-hydroxy-2β (α-methylbutanoyloxy)-β-dihydroagarofuran (1), 1β-acetoxy-8β,9α-dibenzoyloxy-4α,6α-dihydroxy-2β-(α-methylbutanoyloxy)-β-dihydroagarofuran (2), 1β-acetoxy-2β,8β,9α-tribenzoyloxy-6α-hydroxy-β-dihydroagarofuran (3), 1β-acetoxy-2β,8β,9α-tribenzoyloxy-4,6α-dihydroxy-β-dihydroagarofuran (4) and celahin-D (5), as well as five triterpenes including friedelin

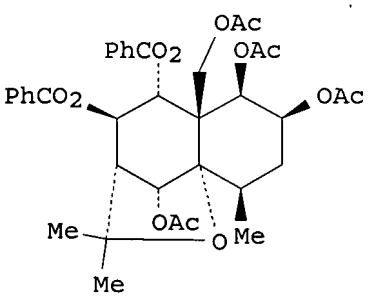
(6), lupeol (7), lupenone (8), betulin (9) and lup-20(29)-en-3β,30-diol (10) were isolated from the EtOH extract of the stems of Celastrus punctatus. The structures of compds. 1 to 10 were established on the basis of spectral anal. Biol. evaluation revealed that these compds. were not highly cytotoxic against KB, Hepa-3B, Hela and COLO-205 cancer cells.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:39190 CAPLUS
DOCUMENT NUMBER: 136:366382
TITLE: Studies on chemical constituents of Adenophora wawreana
AUTHOR(S): Zhao, Kuijun; Liu, Suolan; Yang, Jun; Li, Xiuqing; Yan, Xiaolin; Zheng, Chenggui; Tu, Pengfei; Chen, Hubiao
CORPORATE SOURCE: Department of Pharmacy, Beijing Medical College of PLA, Beijing, 100071, Peop. Rep. China
SOURCE: Zhongcaoyao (2001), 32(11), 964-966
CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER: Zhongcaoyao Zazhi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The chemical constituents of roots of Adenophora wawreana Zahibr. were studied. The chemical constituents were extracted and isolated systematically with solvents and silica gel chromatog. Their structures were determined by IR, 1HNMR, 13CNMR, and MS. Twelve compds. were obtained, and nine of them were identified as β-sitosteryl hexadecanoate (I), β-sitosteryl octadecanoate (II), α-amyrin acetate (III), lupeol acetate (IV), lupenone, friedelin, β-sitosterol (V), ikshusterol, and daucosterol. All of them were obtained for the first time from A. wawreana, and compds. I, II, III, IV, and V were obtained for the first time from Adenophora Fisch.

L10 ANSWER 10 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:477440 CAPLUS
DOCUMENT NUMBER: 133:220150
TITLE: A novel agarofuran sesquiterpene, celahin D from Celastrus hindsii Benth
AUTHOR(S): Huang, Hui-Chi; Shen, Chien-Chang; Chen, Chieh-Fu; Wu, Yang-Chang; Kuo, Yao-Haur
CORPORATE SOURCE: Graduate Institute of Natural Products, Kaohsiung Medical College, Kaohsiung, 807, Taiwan
SOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(7), 1079-1080
CODEN: CPBTAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB A novel agarofuran sesquiterpene polyol ester, 1β,2β,6α,15β-tetraacetoxy-8β,9α-dibenzoyloxy-β-dihydroagarofuran (celahin D, I), two known analogs of 1,1β-acetoxy-8β,9α-dibenzoyloxy-4α,6α-dihydroxy-2β-(α-methylbutanoyloxy)-β-dihydroagarofuran and 1β-acetoxy-8β,9α-dibenzoyloxy-6α-hydroxy-2β-(α-methylbutanoyloxy)-β-dihydroagarofuran, and a known cytotoxic sesquiterpene pyridine alkaloid, emarginatine E, were isolated from the stems of Celastrus hindsii Benth. Three known triterpenes, loranthol, lupenone and friedelinol were also obtained from the titled plant. Structural elucidation of I was established by 2D NMR spectra.

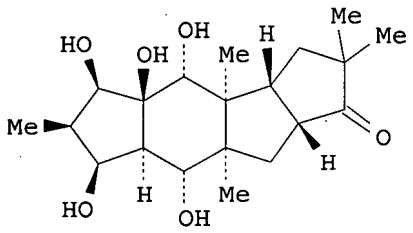
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:52247 CAPLUS
DOCUMENT NUMBER: 132:248540
TITLE: Pentacyclic triterpenes from Chuquiraga ulicina
AUTHOR(S): Flagg, Melissa L.; Valcic, Susanne; Montenegro, Gloria; Gomez, Miguel; Timmermann, Barbara N.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of Pharmacy, The University of Arizona, Tucson, AZ, 85721, USA
SOURCE: Phytochemistry (1999), 52(7), 1345-1350
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Taraxastane triterpenes, 3β-acetoxy-6β-hydroxytaraxasta-20-ene, 6β-hydroxytaraxasta-20-en-3-one, 6β-hydroxytaraxasta-20-ene 3β-palmitate and 3β,6β-dihydroxytaraxasta-20-ene, were isolated from the CH2Cl2-MeOH extract of Chuquiraga ulicina ssp. ulicina in addition to the known triterpenes lupeol, lupenyl acetate, lupenone , friedelinol, 3β-acetoxy-30-nor-lupan-20-one, and 30-nor-lupan-3β-ol-20-one.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:622986 CAPLUS
DOCUMENT NUMBER: 129:313363
TITLE: A tetracyclic diterpene and triterpenes from Euphorbia segetalis
AUTHOR(S): Ferreira, Maria-Jose U.; Madureira, Ana Margarida; Ascenso, Jose R.
CORPORATE SOURCE: Faculdade de Farmacia, Centro de Estudos e de Ciencias Farmaceuticas, Universidade de Lisboa, Lisbon, 1699, Port.
SOURCE: Phytochemistry (1998), 49(1), 179-183
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB A new tetracyclic diterpene, segetalol (I), with a novel carbon skeleton, has been isolated from the acetone extract of the whole plant of Euphorbia segetalis. Seven known compds. were also isolated: the pentacyclic triterpenes friedeline, lupenone, and glutinol, the tetracyclic triterpenes dammaradienol, cycloartenol and 24-methylenecycloartanol and β-sitosterol. The structure of the new compound and its derivs. have been extensively characterized by high-field NMR spectroscopic methods including 2D NMR techniques.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:211856 CAPLUS

DOCUMENT NUMBER: 128:274929

TITLE: Cytotoxic constituents from the fruit of Diospyros ferrea

AUTHOR(S): Kuo, Yao-Haur; Li, Shyh-Yuan; Shen, Chien-Chang; Yang, Li-Ming; Huang, Hui-Chi; Liao, Wen-Bin; Chang, Chi-I.; Kuo, Yueh-Hsiung; Chen, Chieh-Fu

CORPORATE SOURCE: Natl. Res. Inst. Chinese Med., Taipei, 11221, Taiwan

SOURCE: Chinese Pharmaceutical Journal (Taipei) (1997), 49(4), 207-216
CODEN: CPHJEP; ISSN: 1016-1015

PUBLISHER: Pharmaceutical Society of Republic of China

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two naphthoquinones, isodiospyrin (I), and 8'-hydroxyisodiospyrin (II), 6 triterpenes, friedelin, epifriedelinol, lupeol, lupenone, betulin and lup-20(29)-en-3β,30-diol, and 2 sterols, β-sitosterol and stigmasterol, were isolated from the n-hexane extract of the fruit of D. ferrea. All of these compds. were evaluated for in vitro cytotoxicity in 4 cancer cell lines. I and II had strong cytotoxicity against Hep-3B, KB, COLO-205 and HeLa cells (ED50 = 0.17, 1.72, 0.16 and 0.21 μg/mL for I; ED50 = 1.31, 1.75, 1.96 and 1.79 μg/mL for II).

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 1 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:462657 CAPLUS
TITLE: Comparative analysis of triterpenoids from Mikania cordifolia collected from four different locations
AUTHOR(S): Abrao de Oliveira, Patricia; Turatti, Izabel Cristina Casanova; Rodrigues de Oliveira, Dioneia Camilo
CORPORATE SOURCE: Departamento de Quimica, Faculdade Filosofia, Ciencias e Letras de Ribeirao Preto, Universidade de Sao Paulo, Brazil
SOURCE: Revista Brasileira de Ciencias Farmaceuticas (2006), 42(4), 547-552
CODEN: RBCFFM; ISSN: 1516-9332
PUBLISHER: Universidade de Sao Paulo, Faculdade de Ciencias Farmaceuticas
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The species Mikania cordifolia is distributed across America and widely found throughout Brazilian territory, where is popularly used against snake bites. Methanolic and dichloromethanic exts. prepared from M. cordifolia Robinson collected from four different locations in Brazil were submitted to liquid-liquid extraction and the hexanoic phase and residues obtained from this step were analyzed for triterpenoids by gas chromatog. The specimens from Ribeirao Preto-SP and Sao Carlos-SP showed similar triterpenoid composition: α-amyrin, lupeol, lupenone, α-amyrin acetate, β-amyrin acetate, lupeol acetate, taraxasterol acetate, campesterol and β-sitosterol. Besides these triterpenoids, the specimen from Campos de Jordao-SP presented 11-oxours-12-ene, 11-oxoolean-12-ene and taraxerol acetate, and from Monte Verde, epitaraxerol e taraxerol acetate. The triterpene friedelin could be found in specimens from Ribeirao Preto and Sao Carlos.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:513550 CAPLUS
DOCUMENT NUMBER: 141:76694
TITLE: A composition containing triterpenoid saponins extracted from bamboo, and the preparation method and use thereof
INVENTOR(S): Zhang, Ying; Wu, Xiaoqin; Yu, Zhuoyu; Zhu, Yunlong; Chen, Lingen; Luo, Shenggen
PATENT ASSIGNEE(S): Zhejiang University (Hangzhou) Leaf Bio-Technology Co., Ltd., Peop. Rep. China; Shanghai Yunteng Plant-Extract Science and Technology Development Co., Ltd.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052383	A1	20040624	WO 2003-CN309	20030428

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CN 1506373	A	20040623	CN 2002-154401	20021210
AU 2003231499	A1	20040630	AU 2003-231499	20030428
EP 1576958	A1	20050921	EP 2003-724792	20030428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006512330	T	20060413	JP 2004-557744	20030428
US 2006148733	A1	20060706	US 2005-538463	20051123
PRIORITY APPLN. INFO.:			CN 2002-154401 A	20021210
			WO 2003-CN309 W	20030428

AB The present invention relates to an composition containing triterpenoid saponins extracted from Bamboo, and the preparation method and use thereof. The triterpenoid saponins are extracted from various parts of bamboo belonging to Gramineae, such as Bamboo Shavings and the like, using supercrit. CO2 fluid extraction technol. The content of triterpenoid saponins in the composition is 10-90%. The contents of friedelin and lupenone are 5-35% and 1-10% resp. The extract has good anti-free radical, anti-oxidation, antitumor, hypotensive activities and the like. The extract of the present invention can be useful as therapeutic drugs or functional foods for the treatment or prevention of cardiovascular and cerebral vascular diseases, as well as for the treatment of tumor, and useful in cosmetic field.

L10 ANSWER 3 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2004:262878 CAPLUS
DOCUMENT NUMBER:	141:363075
TITLE:	Chemical constituents from Terminalia glabrescens
AUTHOR(S):	Garcez, Fernanda R.; Garcez, Walmir S.; Miguel, Daniel L. S.; Serea, Alessandro A. T.; Prado, Fabiana C.
CORPORATE SOURCE:	Departamento de Quimica, Centro de Ciencias Exatas e Tecnologia, Universidade Federal de Mato Grosso do Sul, Campo Grande, 79070-900, Brazil
SOURCE:	Journal of the Brazilian Chemical Society (2003), 14(3), 461-465 CODEN: JOCSET; ISSN: 0103-5053
PUBLISHER:	Sociedade Brasileira de Quimica
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB A new oleanane-type triterpene (3β,6β,23,28-tetrahydroxyolean-12-ene) was isolated from the leaves of Terminalia glabrescens, together with ursolic, 2α-hydroxyursolic, oleanolic, maslinic, arjunolic, sumaresinolic and asiatic acids, squalene, phytol, sitosterol-3-O-β-D-glucopyranoside and n-alkanes. Friedelin, taraxerol, lupeol, lupenone, betulin, betulone, betulinic acid, arjunglucoside I, stigmastane-3β,6α-diol, β-sitosterol, (-) catechin, β-D-pyranotagatose, β-D-furanofructose and α-D-furanofructose were obtained from the trunk bark.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2003:592477 CAPLUS
DOCUMENT NUMBER:	139:304563
TITLE:	Flavonoid and triterpenes from Stigmaphyllon paralias
AUTHOR(S):	David, Jorge M.; Santos, Fatima A.; Guedes, Maria Lenise da S.; David, Juceni P.
CORPORATE SOURCE:	Instituto de Quimica, Universidade Federal da Bahia, Salvadore-BA, 40170-290, Brazil
SOURCE:	Quimica Nova (2003), 26(4), 484-487 CODEN: QUNODK; ISSN: 0100-4042
PUBLISHER:	Sociedade Brasileira de Quimica

DOCUMENT TYPE: Journal
LANGUAGE: Portuguese
AB Stigmaphyllon paralias is a herb belonging to the family Malpighiaceae that occurs in sand soil of Brazilian "restinga". This is the first report regarding phytochem. study with this species. The hexane extract of the aerial parts of plant afforded the triterpenes friedelin, lupenone, 3-oxo-α-amyrin and 3-oxo-β-amyrin, the mixture of α-amyrinyl palmitate and stearate, lupeol and 3,4-seco-friedelan-3-oic acid. The AcOEt extract yielded the flavonoid luteolin-7-rutinoside. All compds. were characterized by anal. of spectrometric data and the fatty acids esterified with α-amyrin were identified by GC/MS of Me derivs. of transesterified products. This is the first natural occurrence of 3,4-seco-friedelan-3-oic acid and the 13C NMR spectral data were unequivocally assigned by two-dimensional techniques. This work also permitted to correct the 13C NMR resonances attributed to Me groups C-26 and C-27 of friedelin.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:878092 CAPLUS
DOCUMENT NUMBER: 139:81998
TITLE: Study on constituents of latex: triterpenoids of Euphorbia tirucalli
AUTHOR(S): Fujita, Maki; Oka, Hanae; Arai, Yoko; Masuda, Kazuo; Takano, Akihito; Shiojima, Kenji
CORPORATE SOURCE: Showa Pharmaceutical University, Machida, Tokyo, 194-8543, Japan
SOURCE: Natural Medicines (Tokyo, Japan) (2002), 56(4), 160
CODEN: NMEDEO; ISSN: 1340-3443
PUBLISHER: Japanese Society of Pharmacognosy
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The normal hexane extract of Euphorbia tirucalli was chromatographed on silica gel yielding several fractions. Parrafins from fraction 1 were mixts. of C23H48 to C31H64, while fatty acid esters from fraction 2 were esters of compound euphol and tirucallol. Three acetates of euphol, tirucallol and lupeol and two ketones, lupenone and friedelin were detected in fraction 3. Triterpenoid alcs. I, II and glutinol were identified from the alc. fraction of fraction 4.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 34 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:512184 CAPLUS
DOCUMENT NUMBER: 137:291618
TITLE: Furocoumarins, terpenes and sterols from Esenbeckia ovata Kunth
AUTHOR(S): Rios, Maria Yolanda; Delgado, Guillermo
CORPORATE SOURCE: Centro de Investigaciones Quimicas, Universidad Autonoma del Estado de Morelos, Cuernavaca, 62210, Mex.
SOURCE: Biochemical Systematics and Ecology (2002), 30(7), 697-699
CODEN: BSECBU; ISSN: 0305-1978
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Dried leaves from Esenbeckia ovata Kunth (Rutaceae) were exhaustively extracted to provide 145 g of extract that was chromatographed over silica gel 60 using mixts. of n-hexane-Et acetate as eluent. This procedure yielded friedelin, lupenone, caryophyllene β-oxide, lupenol, β-sitosterol, bergapten, isopimpinellin, xanthotoxin,

phellopterin, and cryptomeridiol. The finding of bergapten, isopimpinellin, xanthotoxin and phellopterin in E. ovata characterizes this species as being chemical in accordance with other species of Esenbeckia genus and the Rutaceae family.

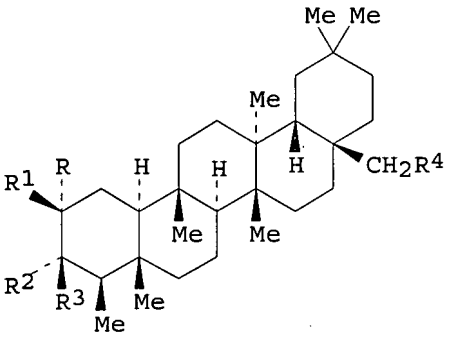
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1940:2698 CAPLUS
DOCUMENT NUMBER: 34:2698
ORIGINAL REFERENCE NO.: 34:404h-i,405a-c
TITLE: Cerin and friedelin. V. Study of friedonic acid
AUTHOR(S): Drake, Nathan L.; Wolfe, John K.
SOURCE: Journal of the American Chemical Society (1939), 61, 3074-8
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. C. A. 30, 7572.2. Details are given of the preparation of friedonic acid (I) (cf. C. A. 31, 7571.9) in 48% yield. In some expts. an isomer (II), m. 126-7°, is obtained; this also results in small yield by treating I with EtONa in EtOH for 48 hrs. I and Me_2SO_4 with MeONa in MeOH or CH_2N_2 or the Na salt with MeI give the Me ester (III), m. 157-8°; this also results from II, Me_2SO_4 and MeONa. Heating I in an atmospheric of N for 2.5 hrs. at 250° gives norfriedelene (IV), $C_{29}H_{48}$, m. 228.5-30°; 1 mole each of CO_2 and H_2O are lost in the reaction; a yellow color with $C(NO_2)_4$ indicates unsatn.; catalytic reduction of IV gives norfriedelane, m. 220-1°, needles having a slight oblique extinction (about 3.2°). Oxidation of III with $KMnO_4$ in AcOH gives norfriedonic acid (V), $C_{29}H_{48}O_3$, m. 215-17°; Me ester (VI), m. 166-7°; oxime, m. 270.5-3° (Me ester, m. 193-5°); III and 2,4-$(O_2N)_2C_6H_4NHNH_2$ give the 2,4-dinitrophenylhydrazone of VI, bright yellow, m. 233-4°. I and $SOCl_2$, refluxed for 30 min., give an amorphous chloride, which is catalytically reduced to norfriedelanylformaldehyde (VII), $C_{30}H_{50}O$, m. 222-5° (prisms with a slight oblique extinction, ca. 19.4°); oxime, m. 255-9°; 2,4-dinitrophenylhydrazone, bright yellow, m. 312-14°. VII and CrO_3 in AcOH give norfriedelanylformic acid, $C_{30}H_{50}O_2$, m. 307-8°; Me ester, m. 230-1.5°. I shows an absorption maximum at 2900 A. (log ε 1.55); the absorption curve in cyclohexane (1%) is given; this confirms the earlier belief that I is not an α,β-unsatd. ketone. The data indicate that I is an ε-ketone, whose CO group is highly sterically hindered and that friedelin must contain in the unit of structure

L21 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:457706 CAPLUS
DOCUMENT NUMBER: 143:332699
TITLE: Quantitative Analysis of Triterpenoid Friedelin in Bamboo Bark (Zhuru) by GC
AUTHOR(S): Yao, Xiaobao; Wu, Xiaoqin; Zhang, Ying
CORPORATE SOURCE: College of Bio-system Engineering and Food Science, Zhejiang University, Hangzhou, 310029, Peop. Rep. China
SOURCE: Yaowu Fenxi Zazhi (2004), 24(4), 387-390
CODEN: YFZADL; ISSN: 0254-1793
PUBLISHER: Yaowu Fenxi Zazhi Bianji Weiyuanhui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The extraction method and quant. anal. of the pentacyclic triterpenoid friedelin from Bamboo bark (Zhuru) by GC were established. Bamboo bark was extracted in Soxhlet using hexane as extraction solvent for 8 h, the chromatog. anal. was performed using HP-5 column (5% Ph Me siloxane, 30 m+0.25 mm+0.25 μm) with FID detector and the column temperature was programmed from 140 degree C to 280 degree C (holding for 22 min) at 20 degree C·min-1. The content of friedelin in bamboo bark of Phyllostachys nigra var. henonis was 0.688%. The lower limit of detectability was 1.01 μg·mL-1, the limit of quantitation was 4.06 μg·mL-1, the recovery was 101.1% with RSD 2.3%. The extraction method was simple and effective, and the quant. anal. was sensitive and precise with good reproducibility, which would be a quant. parameter for quality control of Bamboo bark.

L21 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:466582 CAPLUS
DOCUMENT NUMBER: 117:66582
TITLE: Triterpenoid ketones from Lingnania chungii McClure: arborinone, friedelin and glutinone
AUTHOR(S): Akihisa, Toshihiro; Yamamoto, Kazuhiro; Tamura, Toshitake; Kimura, Yumiko; Iida, Takashi; Nambara, Toshio; Chang, Frederic C.
CORPORATE SOURCE: Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1992), 40(3), 789-91
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The powder coating of a bamboo, Lingnania chungii (=Bambusa chungii) was found to be a rich source of the 3-oxo pentacyclic triterpenes (25% on the recovery basis by chromatog. on silica gel) which contained friedelin, arborinone and glutinone as the major components accompanied by minor amts. of α- and β-amyrenones. A simple procedure for isolation of friedelin is described. All proton and carbon-13 NMR signals for arborinone, friedelin and glutinone were assigned.

L22 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:563783 CAPLUS
DOCUMENT NUMBER: 89:163783
TITLE: Terpenoids and related compounds: part XV. 3α-Hydroxyfriedel-2-one and 2β-acetoxyfriedel-3-one (epicerin acetate), two new pentacyclic triterpenoids from cork waste, their partial syntheses and one-step conversions to friedelin
AUTHOR(S): Talapatra, Sunil K.; Pradhan, Dilip K.; Talapatra, Bani
CORPORATE SOURCE: Dep. Chem., Univ. Coll. Sci., Calcutta, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1978), 16B(5), 361-5
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The new triterpenes I (RR1 = O, R2 = OH, R3 = R4 = H; R = R4 = H, R1 = OAc, R2R3 = O) were isolated from the bark of Quercus suber and their structures determined on the basis of their IR, NMR, and mass spectra and by chemical correlations with friedelin and cerin. Friedelin, cerin, canophyllol (I, R = R1 = H, R2R3 = O, R4 = OH), 3-hydroxyfriedel-3-en-2-one, and betulinic acid were also isolated.

L22 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:418903 CAPLUS
DOCUMENT NUMBER: 83:18903
TITLE: Photochemical reaction of Friedelin. Formation of an ε,ζ-unsaturated aldehyde
AUTHOR(S): Shirasaki, Hidekazu; Aoyagi, Reiko; Tsuyuki, Takahiko; Takahashi, Takeyoshi; Stevenson, Robert
CORPORATE SOURCE: Fac. Sci., Univ. Tokyo, Tokyo, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1975), 48(3), 1073-4
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Friedelin in C5H12 or EtOH was irradiated using a high-pressure Hg lamp under a N atmospheric Among the photolysis products, 10β-(2-formylethyl)-5α-vinyl-des-A-friedelane (I) was isolated. Upon oxidation with Ag2O, I afforded putranjivic acid.

L22 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:35079 CAPLUS
DOCUMENT NUMBER: 80:35079
TITLE: Neutral constituents of Pachysandra terminalis. V. Structures of pachysandiol B and pachysonol, new Friedelin-type triterpenes
AUTHOR(S): Kikuchi, Tohru; Takayama, Masaharu; Toyoda, Tatsuo; Arimoto, Masahiro; Niwa, Mineo
CORPORATE SOURCE: Fac. Pharm. Sci., Kyoto Univ., Kyoto, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1973), 21(10), 2243-51
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The structures of pachysandiol-B and pachysonol, new friedelin type triterpenes isolated from the neutral fraction of P. terminalis (Buxaceae), were investigated and assigned to the formulae I and II, resp., on the basis of chemical and spectroscopic evidence.

L22 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:27402 CAPLUS
DOCUMENT NUMBER: 80:27402
TITLE: Neutral constituents of Pachysandra terminalis. VI. Isolation and structure determination of pachysantriol, a new Friedelin-type triterpene
AUTHOR(S): Kikuchi, Tohru; Niwa, Mineo
CORPORATE SOURCE: Fac. Pharm. Sci., Kyoto Univ., Kyoto, Japan
SOURCE: Yakugaku Zasshi (1973), 93(10), 1378-82
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI For diagram(s), see printed CA Issue.
AB The structure of pachysantriol, a new triterpenetriol isolated from one of the neutral fractions of P. terminalis was I on the basis of chemical and spectroscopic evidence.

L22 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:548514 CAPLUS
DOCUMENT NUMBER: 75:148514
TITLE: Isolation of friedelin from Secamone afzelii
AUTHOR(S): El-Said, F.; Sofowora, E. A.; Salami, M. A.; Sainsbury M.
CORPORATE SOURCE: Fac. Pharm., Univ. Ife, Ife, Nigeria
SOURCE: Phytochemistry (Elsevier) (1971), 10(8), 1940
CODEN: PYTCAS; ISSN: 0031-9422
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Friedelin (I) was isolated from roots of S. afzelii. This is the 2nd report of I occurrence in Asclepiadaceae.

L22 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:488616 CAPLUS
DOCUMENT NUMBER: 71:88616
ORIGINAL REFERENCE NO.: 71:16464h,16465a
TITLE: Biogenetic path from squalene to friedelin
AUTHOR(S): Sengupta, Pasupati
CORPORATE SOURCE: Univ. Kalyani, Kalyani, India
SOURCE: Bulletin of the National Institute of Sciences of India (1968), No. 37, 1-4
CODEN: BNSIAE; ISSN: 0027-9528
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The biosynthetic path for the formation of the oleanene skeleton from squalene type intermediate is well understood. The intermediate cation is supposed to be formed 1st from the attack of aOH+ radical on squalene and it is this cation that will form germanicol, β-amyrin, and δ-amyrin. Also from this cation the following naturally occurring pentacyclic triterpenoids of the modified oleanane skeleton can be formed: taraxerol, multiflorenol, arundoin, glutinone, and friedelin. The occurrence of these triterpenoids in different plants suggests a highly selective control in the backbone rearrangement in plants. However these transformations have not yet been achieved in the laboratory. On the contrary, in the laboratory the rearrangement takes the reverse course. Friedel-3-ene has been converted to a mixture of olean-12-ene and olean-13(18)-ene. In some of these transformations no intermediate can be isolated even under comparatively mild conditions, e.g. conversion of multiflorene to olean-12-ene, while others, e.g. friedel-3-ene, will be completely transformed only under drastic conditions. The mechanism of these transformations and also the structures of other naturally occurring triterpenoids that may very rationally be conceived to have been derived from the intermediate cations in the biogenetic path are discussed in detail.

L22 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:25749 CAPLUS
DOCUMENT NUMBER: 70:25749
ORIGINAL REFERENCE NO.: 70:4811a,4814a
TITLE: Chemical components of Quercus stenophylla. I. Isolation of friedelin from the leaves of Q. stenophylla
AUTHOR(S): Onishi, Yoshiaki; Hanaoka, Miyoji
CORPORATE SOURCE: Osaka Univ., Toyonaka, Japan
SOURCE: Yakugaku Zasshi (1968), 88(9), 1244-5
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Dried leaves (200 g.) of Q. stenophylla are extracted with 800 ml. AcOEt, the extract evaporated, and 12 g. residue obtained. The residue (4 g.) is warmed with 20 ml. C6H6, filtered, the filtrate chromatographed on Al2O3, and the column eluted with C6H6 to give 220 mg. friedelin, needles, m. 250-4° (AcOEt).

L22 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:68022 CAPLUS
DOCUMENT NUMBER: 64:68022
ORIGINAL REFERENCE NO.: 64:12740c-g
TITLE: Base-catalyzed oxidation of friedelin with molecular oxygen
AUTHOR(S): Nishihama, Tadaaki; Takahashi, Takeyoshi
CORPORATE SOURCE: Univ. Tokyo
SOURCE: Bulletin of the Chemical Society of Japan (1966), 39(1), 200
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 64:68022

GI For diagram(s), see printed CA Issue.

AB A solution of friedelin (I) in tert-BuOH containing a 10 molar excess of tert-BuOK was treated 40 hrs. at room temperature with O. The residue was methylated with CH2N2 to give, after chromatographic separation, the unsatd. ester II, m. 214.5-15°. Oxidation of II with O3 and H2O2 gave III (not isolated), which on partial reduction with LiAlH4 followed by treatment with HCl afforded the lactone IV, m. 269°. IV was obtained by another route. 3-Oxo-3a-oxa-A-homofriedelane (V) was converted by the Barbier-Wieland procedure to 2-oxo-3-oxafriedelane (VI),

m. 263-6°. VI with PhMgBr afforded 2-phenyl-3-oxa-1-friedelene (VII), m. 223-5°. Oxidation of VII with CrO_3 furnished III (R = Bz) and on partial reduction with $LiAlH_4$ and subsequent treatment with dilute HCl this gave IV, m. 273-3.5°. IV prepared by either procedure gave 1 spot on a thin-layer chromatogram while alkaline saponification of III (R = Bz), followed by acidification afforded a γ-lactone which showed 1 more spot on the same chromatogram. Thus the configuration at C-10 in IV is the same as that of I and partial isomerization at C-10 takes place under alkaline conditions. On conversion of V to IV the configuration at C-4 is untouched. These observations, together with N.M.R. spectral data (reported) establish the constitution and stereochemistry of II. Failure to isolate a γ-lactone on normal ozonolysis of this unsatd. ester eliminated the alternative structure VIII.

L22 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1965:453986 CAPLUS
DOCUMENT NUMBER: 63:53986
ORIGINAL REFERENCE NO.: 63:9771g-h
TITLE: Friedelin and related compounds. VII. Bromine and N-bromosuccinimide oxidation of the saturated hydrocarbon, friedelane
AUTHOR(S): Kohen, Fortuene; Stevenson, Robert
CORPORATE SOURCE: Brandeis Univ., Waltham, MA
SOURCE: Journal of Organic Chemistry (1965), 30(7), 2479-80
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB cf. CA 58, 6799h. The saturated hydrocarbon friedelane (I) was oxidized by N-bromosuccinimide (II) to friedel-18-ene (III); and in view of the likelihood that the function of II was to provide mol. Br, the action of Br in CCl_4 on I was investigated. The production of III, m. 241-3°, [α]D 16° (c 1.1) demonstrated that the intermediacy of the succinimide radical was unessential in this highly selective oxidation The yield of III from I was shown to be 40% by peracid titration and isolation of 18,19-epoxyfriedelane, m. 254-6°, [α]D 36° (c 0.66), Rf 0.60 (C_6H_6), together with the unstable 18-bromofriedelane, m. 239-40° [α]D 26° (c 0.35), Rf 0.72 (C_6H_6-silica gel), converted by chromatography on neutral Al_2O_3 or Florisil to III. The discrepancies and poor reproducibility in the bromination of friedelin may be attributed to accompanying halogenation at C-18.

L22 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1961:137678 CAPLUS
DOCUMENT NUMBER: 55:137678
ORIGINAL REFERENCE NO.: 55:26018h-i,26019a
TITLE: Friedelin and related compounds. IV. A convenient isolation of friedelin
AUTHOR(S): Stevenson, Robert
CORPORATE SOURCE: Brandeis Univ., Waltham, MA
SOURCE: Journal of Organic Chemistry (1961), 26, 2142-3
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 54, 24849a. Friedelin (I) was readily obtained crude from "smoker wash solids," obtained as a byproduct in the manufacture of corkboard by solvent extraction; purification by chromatographic or recrystn. procedures proved troublesome. NaOAc (1.5 g.) and 1.5 g. $NH_2OH.HCl$ in 20 cc. alc. filtered and the filtrate refluxed 1 hr. with 5 g. I in 100 cc. C_6H_6 gave 3.3 g. friedelin oxime (II), plates, m. 289-92° or 298-302° (in vacuo). I (200 mg.) in 7 cc. C_5H_5N refluxed 45 min. with 200 mg. $NH_2OH.HCl$ gave 200 mg. II. C_6H_6 (50 cc.) and 50 cc. AcOH left 1 hr. with 925 mg. II in 50 cc. 5% $NaNO_2$, the layers separated, the C_6H_6 washed, and

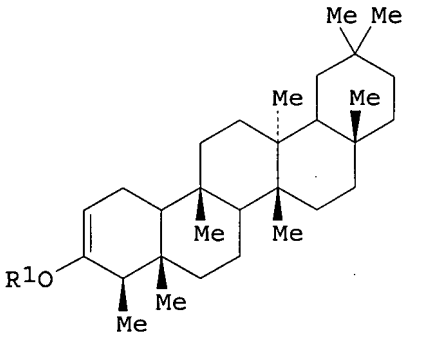
evaporated gave 730 mg. 3-nitriminofriedelane (III), felted needles, m. 224-6° (decomposition) ($CHCl_3$-MeOH), $[\alpha]D$ 32° (c 2.2, $CHCl_3$). III (90 mg.) in 20 cc. dioxane refluxed overnight with 5 cc. H_2O gave 70 mg. I, needles, m. 255-62° (EtOAc). The cork resin extracted with alc. in a Soxhlet extractor gave 22 g. brown solid, which in 375 cc. C_5H_5N refluxed 1 hr. with 24 g. $NH_2OH.HCl$ in 35 cc. H_2O gave 9 g. pure II. Treatment of 20 g. II with 5% $NaNO_2$ gave 16.2 g. III and refluxing in dioxane and H_2O gave 13.1 g. I.

L22 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:218096 CAPLUS
TITLE: Cytotoxic activity of derivatives of the triterpene friedelin.
AUTHOR(S): Shelledy, Linda; Hopper, Amanda L.; Setzer, William N.
CORPORATE SOURCE: Department Chemistry, University Alabama, Huntsville, AL, 35899, USA
SOURCE: Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), CHED-249. American Chemical Society: Washington, D. C.
CODEN: 62PIAJ
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB We have found a number of seco-A triterpenes to exhibit in-vitro cytotoxic activity against human tumor-derived cell lines. In addition, these materials are topoisomerase II inhibitors. In this work, we have isolated friedelin, 1, from cork, carried out a Baeyer-Villiger oxidation to give the lactone 2, and subsequently hydrolyzed the lactone to give the A-ring-opened triterpene 3. These materials have been tested for cytotoxic activity against Hep-G2 human hepatocellular carcinoma cells.

L22 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:14502 CAPLUS
DOCUMENT NUMBER: 122:187820
TITLE: Preparation of friedelin analogs as bactericides, fungicides, etc.
INVENTOR(S): Moiteiro, Cristina Maria Martin; Rosa, Maria Regina Tavares; Marcelo, Curto Maria Joao
PATENT ASSIGNEE(S): Instituto Nacional de Engenharia e Tecnologia Industrial, Port.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9409026	A1	19940428	WO 1993-PT6		19931007
W: CA, JP, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
EP 651760	A1	19950510	EP 1993-922096		19931007
EP 651760	B1	20010418			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE					
AT 200676	T	20010515	AT 1993-922096		19931007
ES 2155836	T3	20010601	ES 1993-922096		19931007
PT 651760	T	20010928	PT 1993-922096		19931007
GR 3035761	T3	20010731	GR 2001-400484		20010419
PRIORITY APPLN. INFO.:			PT 1992-100939	A	19921008
			WO 1993-PT6	W	19931007

OTHER SOURCE(S): MARPAT 122:187820
GI



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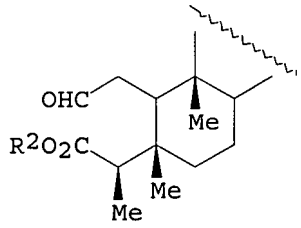

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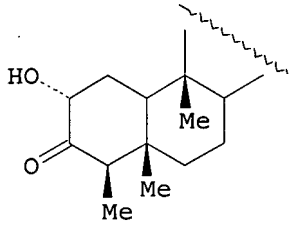


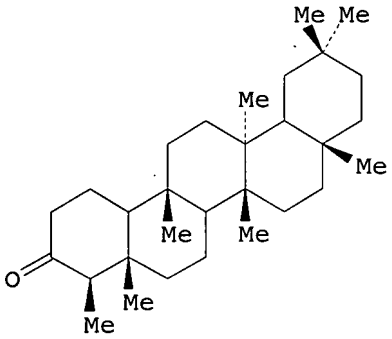
III

AB Title compds., e.g. I and II (R1 = trialkyl- or triphenylsilyl, etc.; R2 = H, ester residue, cation) were prepared as bactericides, fungicides, etc. (no data). Thus, friedelin (isolation from cork smoker wash solids given) was treated with MeC(:NSiMe3)OSiMe3, (Me2N)3P(O), and Na to give I (R1 = SiMe3) which was treated with OsO4 and the product treated with NaHSO4 and Florisil to give III . The latter was treated with periodic acid to give II (R2 = H).

L22 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:466582 CAPLUS
DOCUMENT NUMBER: 117:66582
TITLE: Triterpenoid ketones from Lingnania chungii McClure: arborinone, friedelin and glutinone
AUTHOR(S): Akihisa, Toshihiro; Yamamoto, Kazuhiro; Tamura, Toshitake; Kimura, Yumiko; Iida, Takashi; Nambara, Toshio; Chang, Frederic C.
CORPORATE SOURCE: Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1992), 40(3), 789-91
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The powder coating of a bamboo, Lingnania chungii (=Bambusa chungii) was found to be a rich source of the 3-oxo pentacyclic triterpenes (25% on the recovery basis by chromatog. on silica gel) which contained friedelin, arborinone and glutinone as the major components accompanied by minor amts. of α- and β-amyrenones. A simple procedure for isolation of friedelin is described. All proton and carbon-13 NMR signals for arborinone, friedelin and glutinone were assigned.

L22 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:164556 CAPLUS
DOCUMENT NUMBER: 114:164556
TITLE: Redetermination of the structure of friedelin
AUTHOR(S): Declercq, Jean Paul; Van Puyvelde, Luc; De Kimpe, Norbert; Nagy, Milan; Verhegge, Georges; De Vierman, Roland
CORPORATE SOURCE: Lab. Chim. Phys. Cristallogr., Univ. Cathol. Louvain, Louvain-la-Neuve, B-1348, Belg.
SOURCE: Acta Crystallographica, Section C: Crystal Structure

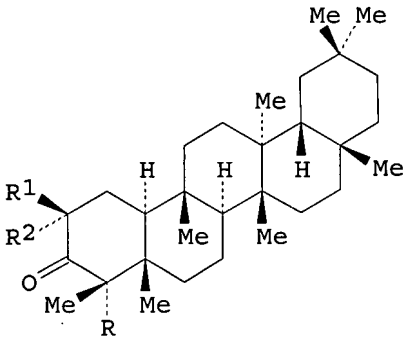
Communications (1991), C47(1), 209-11
CODEN: ACSCEE; ISSN: 0108-2701
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The crystal structure of D:A-Friedooleanan-3-one (I) was determined Friedelin was isolated for the first time from Harungana madagascariensis Lam. ex Poir (Clusiaceae). Recently, the crystal structure was described [Mo, Winther & Scrimgeour (1989)], but with relatively low precision (R = 0.133 for 2201 reflections). Our data are of much better quality: means e.s.d s of bond distances and angles are 0.003 Å and 0.2° here, compared with 0.009 Å and 0.5° in the earlier study. A least-squares mol. fit was also computed between our results (a), the previous x-ray results (b) and calculated force-field coordinates (c). The final root-mean-square deviations, excluding H atoms are: (a)-(b): r.m.s. = 0.096 Å. Differences between the observed and the calculated coordinates are not due to the precision of the crystal structure detns.

L22 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:235638 CAPLUS
DOCUMENT NUMBER: 112:235638
TITLE: Acetoxylation of friedelin by lead (IV) acetate and anti-octant behavior of 2-acetoxyketones
AUTHOR(S): Dutta, G.; Bose, S. N.
CORPORATE SOURCE: Dep. Chem., North Bengal Univ., Darjeeling, 734 430, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1989), 28B(11), 975-7
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 112:235638
GI



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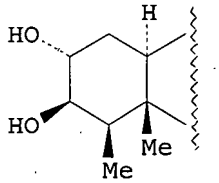


II

AB Four products were isolated by BF3.OEt2-catalyzed Pb(OAc)4 acetoxylation of friedelin. Three of them were characterized as 2α-acetoxyfriedelin (I; R = R1 = H, R2 = OAc), 4α-acetoxyfriedelin (I; R = OAc, R1 = R2 = H) and 2β,4α-diacetoxyfriedelin (I; R = R1 = OAc, R2 = H). The former was efficiently converted into pachysandiol-A (II). Chiroptical measurements (CD) of these 2-acetoxyketones show considerable antioctant behavior.

L22 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:15790 CAPLUS
DOCUMENT NUMBER: 106:15790
TITLE: Friedelin and friedelinol from Clusia ellipticifolia
AUTHOR(S): Salama, Ahmed Mohamed
CORPORATE SOURCE: Fac. Cienc., Univ. Nac. Bogota, Bogota, Colombia
SOURCE: Revista Latinoamericana de Quimica (1986), 16(4), 117-18
CODEN: RLAQA8; ISSN: 0370-5943
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Friedelin and friedelin-3β-ol were isolated from the petroleum ether extract of the stem bark of C. ellipticifolia. The isolated compds. were identified by chemical and spectroscopic methods and by correlation with known compds.

L22 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:606298 CAPLUS
DOCUMENT NUMBER: 105:206298
TITLE: Isolation of friedelin and epifriedelinol from the Clusia ellipticifolia Cuatr. stem bark
AUTHOR(S): Salama, Ahmed Mohamed
CORPORATE SOURCE: Dep. Farm., Univ. Nac., Bogota, Colombia
SOURCE: Revista Colombiana de Ciencias Quimico-Farmaceuticas (1986), 15, 99-104
CODEN: RCQFAQ; ISSN: 0034-7418
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
AB Friedelin (freidooleanan-3-one) and epifriedelinol (friedooleanan-3β-ol) were isolated from the stem bark of C. ellipticifolia. The compds. were identified by chemical and spectroscopic methods.

L22 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:20295 CAPLUS
DOCUMENT NUMBER: 96:20295
TITLE: Studies on the neutral constituents of Pachysandra terminalis Sieb. et Zucc. IX. Structures of pachysandienol-A and -B, novel-type triterpenes related to friedelin

AUTHOR(S): Kikuchi, Tohru; Yokoi, Toshio; Shingu, Tetsuro; Niwa, Mineo

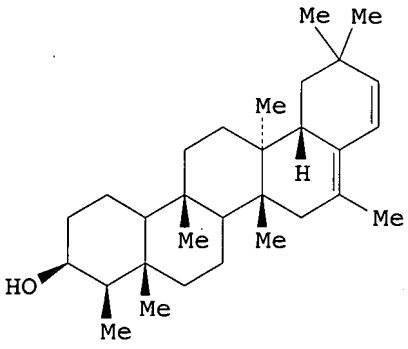
CORPORATE SOURCE: Res. Inst. Wakan-Yaku, Toyama Med. Pharm. Univ., Toyama, 930-01, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1981), 29(9), 2531-9
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



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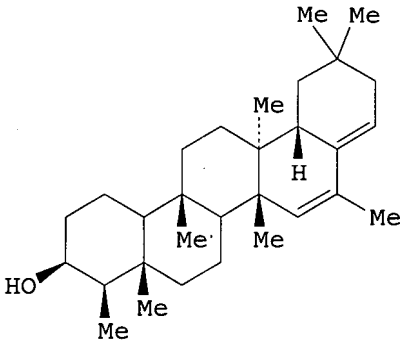


II

AB Two novel-type triperpenes, pachysandienol A and B, were isolated from P. terminalis and proved to have the structures I and II, resp., by means of chemical and spectroscopic studies. These are the first examples among natural products of 28-nor-16-methylfriedelane derivs.

L22 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:188648 CAPLUS

DOCUMENT NUMBER: 94:188648

TITLE: Isolation of a new alkaloid (O-acetylretuline) and a triterpenoid (friedelin) from Strychnos henningsii of Zaire

AUTHOR(S): Angenot, Luc; Tits, Monique

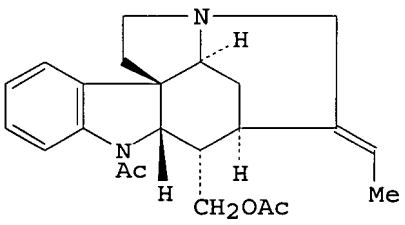
CORPORATE SOURCE: Inst. Pharm., Univ. Liege, Belg.

SOURCE: Planta Medica (1981), 41(3), 240-3
CODEN: PLMEAA; ISSN: 0032-0943

DOCUMENT TYPE: Journal

LANGUAGE: French

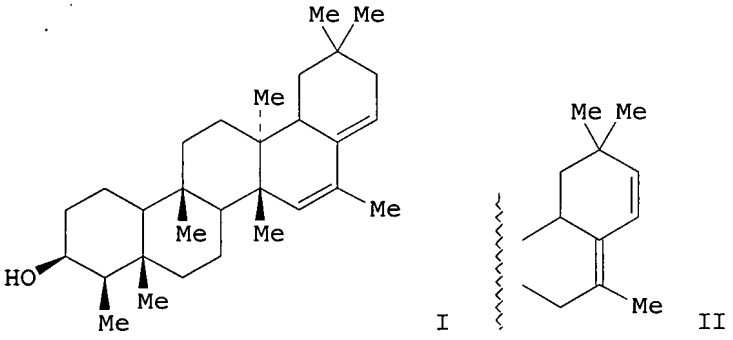
GI



I

AB The new alkaloid O-acetylretuline (I) was isolated from bark and leaves of 2 samples of S. henningsii collected in Zaire. A triterpenoid, friedelin, was also present in this African species of Strychnos.

L22 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:121822 CAPLUS
DOCUMENT NUMBER: 90:121822
TITLE: Application of the INDOR technique to triterpenes. Assignments of methyl resonances of friedelin and related triterpenes
AUTHOR(S): Kikuchi, Tohru; Shingu, Tetsuro; Yokoi, Toshio; Niwa, Mineo
CORPORATE SOURCE: Res. Inst. Oriental Med., Toyama Med. Pharm. Univ., Toyama, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu, 21st (1978), 560-7. Hokkaido Daigaku Nogakubu: Sapporo, Japan.
CODEN: 39NQAF
DOCUMENT TYPE: Conference
LANGUAGE: Japanese
GI



I II

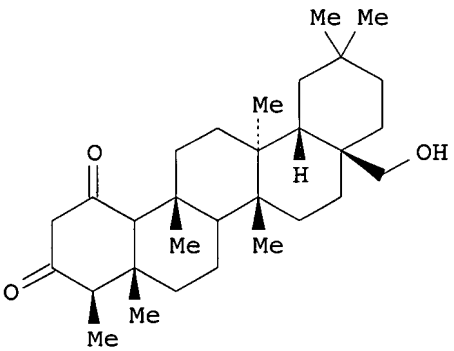
AB The Me signals of friedelin, epifriedelanol acetate, friedelanol acetate, 16-oxofriedelane, 16β-acetoxyfriedelane, 16α-acetoxyfriedelane, shionone, epishionol acetate, and shionol acetate were assigned using the homonuclear INDOR technique in the presence off shift reagent tris[1,1,1,2,2,3,3-heptafluoro-7,7-dimethyl-4,6-octanedionato]praseodymium. Moreover, pachysandienol A and B (I, II, resp.) were isolated from P.terminalis and their structures determined by chemical and spectroscopic methods.

L25 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:248198 CAPLUS
DOCUMENT NUMBER: 146:474996
TITLE: Evaluation of Polygonum bistorta for anticancer potential using selected cancer cell lines
AUTHOR(S): Manoharan, Karuppiah Pillai; Yang, Daiwen; Hsu, Annie; Huat, Benny Tan Kwong
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, National University of Singapore, Singapore, 117543, Singapore
SOURCE: Medicinal Chemistry (2007), 3(2), 121-126
CODEN: MCEHAJ; ISSN: 1573-4064
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The chloroform and hexane fractions and their sub-fractions of Polygonum bistorta (Polygonaceae) were evaluated for their cytotoxic activity against P338 (Murine lymphocytic leukemia), HepG2 (Hepatocellular carcinoma), J82 (Bladder transitional carcinoma), HL60 (Human leukemia), MCF7 (Human breast cancer), and LL2 (Lewis lung carcinoma) cancer cell lines in culture. Both the chloroform and hexane fractions and a few of their sub-fractions showed moderate to very good activity against P388, HL60, and LL2 cancer cell lines. Both active and non-active fractions were further investigated for their chemical constituents. A total of 9 compds., viz. 24(E)-ethylidenecycloartanone (1), 24(E)-ethylidenecycloartan-3α-ol (2), cycloartane-3,24-dione (3), 24-methylenecycloartanone (4), friedelin (5), 3β-friedelinol (6), β-sitosterol (7), γ-sitosterol (8), and β-sitosterone (9) were isolated. One of the pure compds., 24(E)-ethylidenecycloartanone 1, which was obtained in sufficient quantity, was tested for its cytotoxicity against P388, LL2, HL60, and WEHI164 (Murine fibrosarcoma) cancer cell lines but was found to have no activity even at a concentration of 100 μg/mL.
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:498800 CAPLUS
DOCUMENT NUMBER: 143:145584
TITLE: Chemical investigations and biological studies of Mallotus apelta: VI- cytotoxic constituents from Mallotus apelta
AUTHOR(S): Chau, Van Minh; Le, Mai Huong; Phan, Van Kiem; Nguyen, Hoai Nam; Jung, Joon Lee; Young, Ho Kim
CORPORATE SOURCE: Institute of Natural Products Chemistry, Vietnamese Academy of Science and Technology, Vietnam
SOURCE: Tap Chi Hoa Hoc (2005), 43(1), v-vi
CODEN: TCHHDC; ISSN: 0378-2336
PUBLISHER: Toa Soan Tap Chi Hoa Hoc
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. In searching for bioactive compds. from natural products on cytotoxic effects against various cancer cell lines, 22 isolated compds. from Mallotus apelta were tested for their cytotoxic effects against various cancer cell lines, such as KB (human epidermoid carcinoma), FL (fibrillary sarcoma of the uterus), and Hep-2 (human hepatocellular carcinoma) cells in an in vitro assay system. Of which, Malloapelta B showed strong cytotoxic effect against three cancer cell lines as KB, FL, and Hep-2 by in vitro assay. Malloapelta B showed strong cytotoxic effect against all three cancer cell lines as KB (50% inhibitory concentration IC50, 2.12 ± 0.01 μg/mL), FL, and Hep-2, while the other compds. did not show inhibitory activities with IC50 values over 50 μM.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:537988 CAPLUS
DOCUMENT NUMBER: 129:173100
TITLE: The cytotoxic activity of a Salacia liana species from Monteverde, Costa Rica, is due to a high concentration to tingenone
AUTHOR(S): Setzer, William N.; Setzer, Mary C.; Hopper, Amanda L.; Moriarity, Debra M.; Lehrman, Ginger K.; Niekamp, Katherine L.; Morcomb, Suzanne M.; Bates, Robert B.; McClure, Kelly J.; Stessman, Chad C.; Haber, William A.
CORPORATE SOURCE: Department Chemistry, University Alabama, Huntsville, AL, 35899, USA
SOURCE: Planta Medica (1998), 64(6), 583
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The cytotoxic activity of a Salacia species from lower montan moist forest at 1350 m at Monteverde, Costa Rica, was investigated. The stem bark was extracted with CHCl3 to obtain extract The crude extract showed in vitro cytotoxic activity against Hep-HG2 (human hepatocellular carcinoma), H-4-II-E (rat hepatoma), and SK-Mel-28 (human melanoma) cell lines. The extract was subjected to a bioactivity-directed flash chromatog. and the following compds. were isolated: friedelin, 1-hydroxy-3,6-dimethoxy-8-methyl-9H-xanthen-9-one, friedelan-3-on-29-al, canophyllol, 29-hydroxyfriedelan-3-one, and tingenone (cytotoxic, 0.24% of the fresh bark). In vitro cytotoxicity (IC50 values) for tingenone was 1.9, 2.7, and 1.7 μM against Hep-G2, H-4-II-E, and SK-Mel-28 cell lines, resp.

L25 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:31640 CAPLUS
DOCUMENT NUMBER: 128:32350
TITLE: Friedelane Triterpenoids from Maytenus macrocarpa
AUTHOR(S): Chavez, H.; Estevez-Braun, A.; Ravelo, A. G.; Gonzalez, A. G.
CORPORATE SOURCE: Instituto Universitario de Bio-Organica Antonio Gonzalez, Universidad de La Laguna, Tenerife, 38206, Spain
SOURCE: Journal of Natural Products (1998), 61(1), 82-85
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB A set of friedelane triterpenoids has been isolated from the stem bark exudates of Maytenus macrocarpa. It includes a new friedelan triterpene (I), together with the known compds. friedelin, 3-oxo-29-hydroxyfriedelane, 3-oxofriedelan-25-al, and canophyllol. The structures of these compds. were elucidated by spectroscopic and chemical evidence. Complete 1H and 13C assignments were achieved by 2D NMR spectroscopy. The new compound showed weak activity against aldose reductase. It did not display antitumor activity against P-388 lymphoid neoplasm, A-549 human lung carcinoma, HT-29 human colon carcinoma, or MEL-28 human melanoma cell lines.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:220856 CAPLUS

TITLE: A phytochemical investigation of alchornea latifolia (euphorbiaceae).

AUTHOR(S): Shen, Xiaoming; Setzer, William N.; Zhang, Ping; Moriarity, Debra M.; Lawton, Robert O.

CORPORATE SOURCE: Department Chemistry, University Alabama Huntsville, Huntsville, AL, 35899, USA

SOURCE: Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), ORGN-252. American Chemical Society: Washington, D. C.
CODEN: 62PIAJ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Leaves of Alchornea latifolia (Euphorbiaceae), collected from Monteverde, Costa Rica, have been extracted (chloroform extraction and ethanol extraction). The crude exts. show in-vitro cytotoxic activity against Hep-G2 human hepatocellular carcinoma. In a search for the bioactive materials from this plant, we have isolated, purified, and structurally characterized a number of components from the crude exts. In addition to the triterpenes friedelin and taraxerone, and the sterol β-sitosterol, the A-ring-opened triterpenes 1-4 have been isolated by preparative liquid chromatog. and their structures verified by NMR spectroscopy.

L25 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:218096 CAPLUS

TITLE: Cytotoxic activity of derivatives of the triterpene friedelin.

AUTHOR(S): Shelledy, Linda; Hopper, Amanda L.; Setzer, William N.

CORPORATE SOURCE: Department Chemistry, University Alabama, Huntsville, AL, 35899, USA

SOURCE: Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), CHED-249. American Chemical Society: Washington, D. C.
CODEN: 62PIAJ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB We have found a number of seco-A triterpenes to exhibit in-vitro cytotoxic activity against human tumor-derived cell lines. In addition, these materials are topoisomerase II inhibitors. In this work, we have isolated friedelin, 1, from cork, carried out a Baeyer-Villiger oxidation to give the lactone 2, and subsequently hydrolyzed the lactone to give the A-ring-opened triterpene 3. These materials have been tested for cytotoxic activity against Hep-G2 human hepatocellular carcinoma cells.

L25 ANSWER 7 OF 9 MEDLINE on STN

ACCESSION NUMBER: 2007149868 MEDLINE

DOCUMENT NUMBER: PubMed ID: 17348850
TITLE: Evaluation of Polygonum bistorta for anticancer potential using selected cancer cell lines.
AUTHOR: Manoharan Karuppiah Pillai; Yang Daiwen; Hsu Annie; Huat Benny Tan Kwong
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, National University of Singapore, Singapore.
SOURCE: Medicinal chemistry (Sh ariqah, United Arab Emirates), (2007 Mar) Vol. 3, No. 2, pp. 121-6.
Journal code: 101240303. ISSN: 1573-4064.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200705
ENTRY DATE: Entered STN: 13 Mar 2007
Last Updated on STN: 16 May 2007
Entered Medline: 15 May 2007

AB The chloroform and hexane fractions and their sub-fractions of Polygonum bistorta (Polygonaceae) were evaluated for their cytotoxic activity against P338 (Murine lymphocytic leukaemia), HepG2 (Hepatocellular carcinoma), J82 (Bladder transitional carcinoma), HL60 (Human leukaemia), MCF7 (Human breast cancer) and LL2 (Lewis lung carcinoma) cancer cell lines in culture. Both the chloroform and hexane fractions and a few of their sub-fractions showed moderate to very good activity against P388, HL60 and LL2 cancer cell lines. Both active and non-active fractions were further investigated for their chemical constituents. A total of nine compounds, viz. 24(E)-ethylidenecycloartanone (1), 24(E)-ethylidenecycloartan-3alpha-ol (2), cycloartane-3,24-dione (3), 24-methylenecycloartanone (4), friedelin (5), 3beta-friedelinol (6), beta-sitosterol (7), gamma-sitosterol (8) and beta-sitosterone (9) were isolated. One of the pure compounds, 24(E)-ethylidenecycloartanone 1, which was obtained in sufficient quantity, was tested for its cytotoxicity against P388, LL2, HL60 and WEHI164 (Murine fibrosarcoma) cancer cell lines but was found to have no activity even at a concentration of 100 microg/mL.

L25 ANSWER 8 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2006460370 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 16883274
TITLE: Cytotoxic activities of chemical constituents from Mesua daphnifolia.
AUTHOR: Ee G C L; Lim C K; Rahmat A; Lee H L
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
SOURCE: Tropical biomedicine, (2005 Dec) Vol. 22, No. 2, pp. 99-102.
Journal code: 8507086. ISSN: 0127-5720.
PUB. COUNTRY: Malaysia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 3 Aug 2006
Last Updated on STN: 12 Dec 2006

AB Detail chemical investigations on the stem bark of Mesua daphnifolia gave three triterpenoids and four xanthones. They are friedelin (1), friedelan-1,3-dione (2), lup-20(29)- en-3ss-ol (3), cudraxanthone G (4), ananixanthone (5), 1,3,5-trihydroxy-4-methoxyxanthone (6) and euxanthone (7). These chemical constituents were tested in vitro for their cytotoxic activities against four cell lines, MDA-MB-231 (human estrogen receptor negative breast cancer), HeLa (cervical carcinoma), CEM-SS (T-lymphoblastic leukemia) and CaOV3 (human ovarian cancer). Compound 4

showed a broad spectrum of activity against the MDA-MB-231, HeLa and CEM-SS cell lines with IC5 0 values of 1.3, 4.0 and 6.7 microg/ml respectively. Meanwhile, the other compounds 1, 2, 3, 5, 6 and 7 gave only selective activities against the cell lines.

L25 ANSWER 9 OF 9 MEDLINE on STN
ACCESSION NUMBER: 1998123208 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9461656
TITLE: Friedelane triterpenoids from Maytenus macrocarpa.
AUTHOR: Chavez H; Estevez-Braun A; Ravelo A G; Gonzalez A G
CORPORATE SOURCE: Instituto Universitario de Bio-Organica, Antonio Gonzalez, Universidad de Laguna, Tenerife, Canary Island, Spain.
SOURCE: Journal of natural products, (1998 Jan) Vol. 61, No. 1, pp. 82-5.
Journal code: 7906882. ISSN: 0163-3864.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199803
ENTRY DATE: Entered STN: 26 Mar 1998
Last Updated on STN: 26 Mar 1998
Entered Medline: 16 Mar 1998

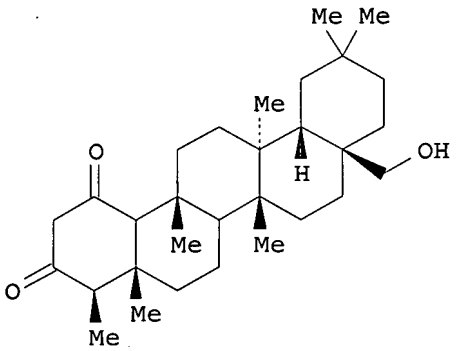
AB A set of friedelane triterpenoids has been isolated from the stem bark exudates of Maytenus macrocarpa. It includes a new friedelan triterpene (1), together with the known compounds friedelin, 3-oxo-29-hydroxyfriedelane, 3-oxofriedelan-25-al, and canophyllol. The structures of these compounds were elucidated by spectroscopic and chemical evidence. Complete 1H and 13C assignments were achieved by 2D NMR spectroscopy. The new compound showed weak activity against aldose reductase. It did not display antitumor activity against P-388 lymphoid neoplasm, A-549 human lung carcinoma, HT-29 human colon carcinoma, or MEL-28 human melanoma cell lines.

L25 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:248198 CAPLUS
DOCUMENT NUMBER: 146:474996
TITLE: Evaluation of Polygonum bistorta for anticancer potential using selected cancer cell lines
AUTHOR(S): Manoharan, Karuppiah Pillai; Yang, Daiwen; Hsu, Annie; Huat, Benny Tan Kwong
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, National University of Singapore, Singapore, 117543, Singapore
SOURCE: Medicinal Chemistry (2007), 3(2), 121-126
CODEN: MCEHAJ; ISSN: 1573-4064
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The chloroform and hexane fractions and their sub-fractions of Polygonum bistorta (Polygonaceae) were evaluated for their cytotoxic activity against P338 (Murine lymphocytic leukemia), HepG2 (Hepatocellular carcinoma), J82 (Bladder transitional carcinoma), HL60 (Human leukemia), MCF7 (Human breast cancer), and LL2 (Lewis lung carcinoma) cancer cell lines in culture. Both the chloroform and hexane fractions and a few of their sub-fractions showed moderate to very good activity against P388, HL60, and LL2 cancer cell lines. Both active and non-active fractions were further investigated for their chemical constituents. A total of 9 compds., viz. 24(E)-ethylidenecycloartanone (1), 24(E)-ethylidenecycloartan-3α-ol (2), cycloartane-3,24-dione (3), 24-methylenecycloartanone (4), friedelin (5), 3β-friedelinol (6), β-sitosterol (7), γ-sitosterol (8), and β-sitosterone (9) were isolated. One of the pure compds., 24(E)-ethylidenecycloartanone 1, which was obtained in sufficient quantity, was tested for its cytotoxicity against P388, LL2, HL60, and WEHI164 (Murine fibrosarcoma) cancer cell lines but was found to have no activity even at a concentration of 100 μg/mL.
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:498800 CAPLUS
DOCUMENT NUMBER: 143:145584
TITLE: Chemical investigations and biological studies of Mallotus apelta: VI- cytotoxic constituents from Mallotus apelta
AUTHOR(S): Chau, Van Minh; Le, Mai Huong; Phan, Van Kiem; Nguyen, Hoai Nam; Jung, Joon Lee; Young, Ho Kim
CORPORATE SOURCE: Institute of Natural Products Chemistry, Vietnamese Academy of Science and Technology, Vietnam
SOURCE: Tap Chi Hoa Hoc (2005), 43(1), v-vi
CODEN: TCHHDC; ISSN: 0378-2336
PUBLISHER: Toa Soan Tap Chi Hoa Hoc
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. In searching for bioactive compds. from natural products on cytotoxic effects against various cancer cell lines, 22 isolated compds. from Mallotus apelta were tested for their cytotoxic effects against various cancer cell lines, such as KB (human epidermoid carcinoma), FL (fibrillary sarcoma of the uterus), and Hep-2 (human hepatocellular carcinoma) cells in an in vitro assay system. Of which, Malloapelta B showed strong cytotoxic effect against three cancer cell lines as KB, FL, and Hep-2 by in vitro assay. Malloapelta B showed strong cytotoxic effect against all three cancer cell lines as KB (50% inhibitory concentration IC50, 2.12 ± 0.01 μg/mL), FL, and Hep-2, while the other compds. did not show inhibitory activities with IC50 values over 50 μM.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:537988 CAPLUS
DOCUMENT NUMBER: 129:173100
TITLE: The cytotoxic activity of a Salacia liana species from Monteverde, Costa Rica, is due to a high concentration to tingenone
AUTHOR(S): Setzer, William N.; Setzer, Mary C.; Hopper, Amanda L.; Moriarity, Debra M.; Lehrman, Ginger K.; Niekamp, Katherine L.; Morcomb, Suzanne M.; Bates, Robert B.; McClure, Kelly J.; Stessman, Chad C.; Haber, William A.
CORPORATE SOURCE: Department Chemistry, University Alabama, Huntsville, AL, 35899, USA
SOURCE: Planta Medica (1998), 64(6), 583
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The cytotoxic activity of a Salacia species from lower montan moist forest at 1350 m at Monteverde, Costa Rica, was investigated. The stem bark was extracted with CHCl3 to obtain extract The crude extract showed in vitro cytotoxic activity against Hep-HG2 (human hepatocellular carcinoma), H-4-II-E (rat hepatoma), and SK-Mel-28 (human melanoma) cell lines. The extract was subjected to a bioactivity-directed flash chromatog. and the following compds. were isolated: friedelin, 1-hydroxy-3,6-dimethoxy-8-methyl-9H-xanthen-9-one, friedelan-3-on-29-al, canophyllol, 29-hydroxyfriedelan-3-one, and tingenone (cytotoxic, 0.24% of the fresh bark). In vitro cytotoxicity (IC50 values) for tingenone was 1.9, 2.7, and 1.7 μM against Hep-G2, H-4-II-E, and SK-Mel-28 cell lines, resp.

L25 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:31640 CAPLUS
DOCUMENT NUMBER: 128:32350
TITLE: Friedelane Triterpenoids from Maytenus macrocarpa
AUTHOR(S): Chavez, H.; Estevez-Braun, A.; Ravelo, A. G.; Gonzalez, A. G.
CORPORATE SOURCE: Instituto Universitario de Bio-Organica Antonio Gonzalez, Universidad de La Laguna, Tenerife, 38206, Spain
SOURCE: Journal of Natural Products (1998), 61(1), 82-85
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB A set of friedelane triterpenoids has been isolated from the stem bark exudates of Maytenus macrocarpa. It includes a new friedelan triterpene (I), together with the known compds. friedelin, 3-oxo-29-hydroxyfriedelane, 3-oxofriedelan-25-al, and canophyllol. The structures of these compds. were elucidated by spectroscopic and chemical evidence. Complete 1H and 13C assignments were achieved by 2D NMR spectroscopy. The new compound showed weak activity against aldose reductase. It did not display antitumor activity against P-388 lymphoid neoplasm, A-549 human lung carcinoma, HT-29 human colon carcinoma, or MEL-28 human melanoma cell lines.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:220856 CAPLUS

TITLE: A phytochemical investigation of alchornea latifolia (euphorbiaceae).

AUTHOR(S): Shen, Xiaoming; Setzer, William N.; Zhang, Ping; Moriarity, Debra M.; Lawton, Robert O.

CORPORATE SOURCE: Department Chemistry, University Alabama Huntsville, Huntsville, AL, 35899, USA

SOURCE: Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), ORGN-252. American Chemical Society: Washington, D. C.
CODEN: 62PIAJ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Leaves of Alchornea latifolia (Euphorbiaceae), collected from Monteverde, Costa Rica, have been extracted (chloroform extraction and ethanol extraction). The crude exts. show in-vitro cytotoxic activity against Hep-G2 human hepatocellular carcinoma. In a search for the bioactive materials from this plant, we have isolated, purified, and structurally characterized a number of components from the crude exts. In addition to the triterpenes friedelin and taraxerone, and the sterol β-sitosterol, the A-ring-opened triterpenes 1-4 have been isolated by preparative liquid chromatog. and their structures verified by NMR spectroscopy.

L25 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:218096 CAPLUS

TITLE: Cytotoxic activity of derivatives of the triterpene friedelin.

AUTHOR(S): Shelledy, Linda; Hopper, Amanda L.; Setzer, William N.

CORPORATE SOURCE: Department Chemistry, University Alabama, Huntsville, AL, 35899, USA

SOURCE: Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), CHED-249. American Chemical Society: Washington, D. C.
CODEN: 62PIAJ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB We have found a number of seco-A triterpenes to exhibit in-vitro cytotoxic activity against human tumor-derived cell lines. In addition, these materials are topoisomerase II inhibitors. In this work, we have isolated friedelin, 1, from cork, carried out a Baeyer-Villiger oxidation to give the lactone 2, and subsequently hydrolyzed the lactone to give the A-ring-opened triterpene 3. These materials have been tested for cytotoxic activity against Hep-G2 human hepatocellular carcinoma cells.

L25 ANSWER 7 OF 9 MEDLINE on STN

ACCESSION NUMBER: 2007149868 MEDLINE

DOCUMENT NUMBER: PubMed ID: 17348850
TITLE: Evaluation of Polygonum bistorta for anticancer potential using selected cancer cell lines.
AUTHOR: Manoharan Karuppiah Pillai; Yang Daiwen; Hsu Annie; Huat Benny Tan Kwong
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, National University of Singapore, Singapore.
SOURCE: Medicinal chemistry (Sh ariqah, United Arab Emirates), (2007 Mar) Vol. 3, No. 2, pp. 121-6.
Journal code: 101240303. ISSN: 1573-4064.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200705
ENTRY DATE: Entered STN: 13 Mar 2007
Last Updated on STN: 16 May 2007
Entered Medline: 15 May 2007

AB The chloroform and hexane fractions and their sub-fractions of Polygonum bistorta (Polygonaceae) were evaluated for their cytotoxic activity against P338 (Murine lymphocytic leukaemia), HepG2 (Hepatocellular carcinoma), J82 (Bladder transitional carcinoma), HL60 (Human leukaemia), MCF7 (Human breast cancer) and LL2 (Lewis lung carcinoma) cancer cell lines in culture. Both the chloroform and hexane fractions and a few of their sub-fractions showed moderate to very good activity against P388, HL60 and LL2 cancer cell lines. Both active and non-active fractions were further investigated for their chemical constituents. A total of nine compounds, viz. 24(E)-ethylidenecycloartanone (1), 24(E)-ethylidenecycloartan-3alpha-ol (2), cycloartane-3,24-dione (3), 24-methylenecycloartanone (4), friedelin (5), 3beta-friedelinol (6), beta-sitosterol (7), gamma-sitosterol (8) and beta-sitosterone (9) were isolated. One of the pure compounds, 24(E)-ethylidenecycloartanone 1, which was obtained in sufficient quantity, was tested for its cytotoxicity against P388, LL2, HL60 and WEHI164 (Murine fibrosarcoma) cancer cell lines but was found to have no activity even at a concentration of 100 microg/mL.

L25 ANSWER 8 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2006460370 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 16883274
TITLE: Cytotoxic activities of chemical constituents from Mesua daphnifolia.
AUTHOR: Ee G C L; Lim C K; Rahmat A; Lee H L
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
SOURCE: Tropical biomedicine, (2005 Dec) Vol. 22, No. 2, pp. 99-102.
Journal code: 8507086. ISSN: 0127-5720.
PUB. COUNTRY: Malaysia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 3 Aug 2006
Last Updated on STN: 12 Dec 2006

AB Detail chemical investigations on the stem bark of Mesua daphnifolia gave three triterpenoids and four xanthones. They are friedelin (1), friedelan-1,3-dione (2), lup-20(29)- en-3ss-ol (3), cudraxanthone G (4), ananixanthone (5), 1,3,5-trihydroxy-4-methoxyxanthone (6) and euxanthone (7). These chemical constituents were tested in vitro for their cytotoxic activities against four cell lines, MDA-MB-231 (human estrogen receptor negative breast cancer), HeLa (cervical carcinoma), CEM-SS (T-lymphoblastic leukemia) and CaOV3 (human ovarian cancer). Compound 4

showed a broad spectrum of activity against the MDA-MB-231, HeLa and CEM-SS cell lines with IC5 0 values of 1.3, 4.0 and 6.7 microg/ml respectively. Meanwhile, the other compounds 1, 2, 3, 5, 6 and 7 gave only selective activities against the cell lines.

L25 ANSWER 9 OF 9 MEDLINE on STN
ACCESSION NUMBER: 1998123208 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9461656
TITLE: Friedelane triterpenoids from Maytenus macrocarpa.
AUTHOR: Chavez H; Estevez-Braun A; Ravelo A G; Gonzalez A G
CORPORATE SOURCE: Instituto Universitario de Bio-Organica, Antonio Gonzalez, Universidad de Laguna, Tenerife, Canary Island, Spain.
SOURCE: Journal of natural products, (1998 Jan) Vol. 61, No. 1, pp. 82-5.
Journal code: 7906882. ISSN: 0163-3864.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199803
ENTRY DATE: Entered STN: 26 Mar 1998
Last Updated on STN: 26 Mar 1998
Entered Medline: 16 Mar 1998

AB A set of friedelane triterpenoids has been isolated from the stem bark exudates of Maytenus macrocarpa. It includes a new friedelan triterpene (1), together with the known compounds friedelin, 3-oxo-29-hydroxyfriedelane, 3-oxofriedelan-25-al, and canophyllol. The structures of these compounds were elucidated by spectroscopic and chemical evidence. Complete 1H and 13C assignments were achieved by 2D NMR spectroscopy. The new compound showed weak activity against aldose reductase. It did not display antitumor activity against P-388 lymphoid neoplasm, A-549 human lung carcinoma, HT-29 human colon carcinoma, or MEL-28 human melanoma cell lines.

L26 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:341293 CAPLUS
DOCUMENT NUMBER: 141:103190
TITLE: Cytotoxic lupane-type triterpenoids from Acacia mellifera
AUTHOR(S): Mutai, Charles; Abatis, Dennis; Vagias, Constantinos; Moreau, Dimitri; Roussakis, Christos; Roussis, Vassilios
CORPORATE SOURCE: Department of Pharmacy, Division of Pharmacognosy and Chemistry of Natural Products, University of Athens, Athens, 157 71, Greece
SOURCE: Phytochemistry (Elsevier) (2004), 65(8), 1159-1164
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB One new and eight previously described lupane-type metabolites were isolated for the first time from Acacia mellifera (Leguminosae). Based on spectral analyses, the structure of the new compound was elucidated as 28-hydroxy-3-oxo-lup-20-(29)-en-30-al (1), while the known compds. were identified as 3-oxo-lup-20-(29)-en-30-al (2), 3-hydroxy-lup-20-(29)-en-30-al (3), 28-hydroxy-lup-20-(29)-en-3-one (4), lupenone (5), lupeol (6), betulin (7), betulinic acid (8), and betulonic acid (9). Metabolites 2, 3, and 4 are reported for the first time in the Leguminosae family. The cytotoxicity of the isolated metabolites was evaluated on the NSCLC-N6 cell line, derived from a human non-small-cell bronchopulmonary carcinoma. Compds. 1 and 3 exhibited significant levels of activity.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:526503 CAPLUS
DOCUMENT NUMBER: 127:238976
TITLE: Cytotoxic constituents from the stems of Diospyros maritima
AUTHOR(S): Kuo, Yao Haur; Chang, Chi I.; Li, Shyh Yuan; Chou, Cheng Jen; Chen, Chieh Fu; Kuo, Yueh Hsiung; Lee, Kuo Hsiung
CORPORATE SOURCE: National Research Institute Chinese Medicine, Taipei, 11221, Taiwan
SOURCE: Planta Medica (1997), 63(4), 363-365
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Thieme
DOCUMENT TYPE: Journal
LANGUAGE: English
AB One novel coumaric acid ester of lupeol, dioslupecin A (I), three naphthoquinones, 8'-hydroxyisodiospyrin (II), isodiospyrin (III), and plumbagin (IV), three triterpenes, lupeol, lupenone, and taraxerone, and four sterols, β-sitosterol, stigmasterol, stigmast-4-en-3-one, and ergosta-4,6,8(14),22-tetraen-3-one were isolated from the n-hexane extract of the stems of Diospyros maritima. The structural determination of I was based on 1D and 2D NMR spectra . All compds. were evaluated for in vitro cytotoxicity in 4 cancer cell lines. II showed similar cytotoxicity against hepatoma (HEPA-3B, ED50 = 1.72 μg/mL), nasopharynx carcinoma (KB, ED50 = 1.85 μg/mL), colon carcinoma (COLO-205, ED50 = 2.24 mg/mL) and cervical carcinoma (HELA, ED50 = 1.92 μg/mL). III and IV exhibited strong cytotoxicity against HEPA-3B, KB, COLO-205 and HElA (ED50 = 0.25, 1.81, 0.13, and 0.27 μg/mL for III; ED50 = 0.87, 3.27, 0.56, and 0.35 μg/mL for IV), resp.

L26 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1971:472431 CAPLUS
DOCUMENT NUMBER: 75:72431
TITLE: Biological and phytochemical evaluation of plants. IX. Antitumor activity of Maytenus senegalensis (Celastraceae) and a preliminary phytochemical investigation
AUTHOR(S): Tin-Wa, M.; Farnsworth, N. R.; Fong, H. H. S.; Blomster, R. N.; Trojanek, J.; Abraham, D. J.; Persinos, G. J.; Dokosi, O. B.
CORPORATE SOURCE: Sch. Pharm., Univ. Pittsburgh, Pittsburgh, PA, USA
SOURCE: Lloydia (1971), 34(1), 79-87
CODEN: LLOYA2; ISSN: 0024-5461
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Material isolated from M. senegalensis was tested for cytotoxic effect against 9KB carcinoma and L-120 and PS leukemia. Extraction of ground plant material with Skellysolve B yielded a new compound, triterpene A, C30H48O3, m. 262, [α]26D -32.4 (in CHCl3) and β-amyrin. Further extraction of the defatted material with EtOH followed by CHCl3 fractionation and Craig countercurrent distribution yielded lupenone, β-sitosterol, dulcitol, wilforine, a 2nd new compound, triterpene B (C30H46O3), and β-sitosterol xyloside, not previously isolated from a member of the plant kingdom. Dulcitol isolated in high yield inhibited PS leukemia at a dose of 500 mg/kg but was not cytotoxic.

L26 ANSWER 4 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2004213955 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15110698
TITLE: Cytotoxic lupane-type triterpenoids from Acacia mellifera.
AUTHOR: Mutai Charles; Abatis Dennis; Vagias Constantinos; Moreau Dimitri; Roussakis Christos; Roussis Vassilios
CORPORATE SOURCE: University of Athens, Department of Pharmacy, Division of Pharmacognosy and Chemistry of Natural Products, Panepistimiopolis Zografou, Athens 157 71, Greece.
SOURCE: Phytochemistry, (2004 Apr) Vol. 65, No. 8, pp. 1159-64.
Journal code: 0151434. ISSN: 0031-9422.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200407
ENTRY DATE: Entered STN: 28 Apr 2004
Last Updated on STN: 13 Jul 2004
Entered Medline: 12 Jul 2004

AB One new and eight previously described lupane-type metabolites were isolated for the first time from Acacia mellifera (Leguminosae). Based on spectral analyses, the structure of the new compound was elucidated as 28-hydroxy-3-oxo-lup-20-(29)-en-30-al (1), while the known compounds were identified as 3-oxo-lup-20-(29)-en-30-al (2), 3-hydroxy-lup-20-(29)-en-30-al (3), 28-hydroxy-lup-20-(29)-en-3-one (4), lupenone (5), lupeol (6), betulin (7), betulinic acid (8), and betulonic acid (9). Metabolites 2, 3, and 4 are reported for the first time in the Leguminosae family. The cytotoxicity of the isolated metabolites was evaluated on the NSCLC-N6 cell line, derived from a human non-small-cell bronchopulmonary carcinoma. Compounds 1 and 3 exhibited significant levels of activity.

L26 ANSWER 5 OF 5 MEDLINE on STN
ACCESSION NUMBER: 97416431 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9270382
TITLE: Cytotoxic constituents from the stems of Diospyros maritima.

AUTHOR: Kuo Y H; Chang C I; Li S Y; Chou C J; Chen C F; Kuo Y H; Lee K H
SOURCE: Planta medica, (1997 Aug) Vol. 63, No. 4, pp. 363-5.
Journal code: 0066751. ISSN: 0032-0943.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Letter
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199709
ENTRY DATE: Entered STN: 8 Oct 1997
Last Updated on STN: 8 Oct 1997
Entered Medline: 19 Sep 1997

AB One novel coumaric acid ester of lupeol, dioslupecin A (1), three naphthoquinones, 8'-hydroxyisodiospyrin (2), isodiospyrin (3), and plumbagin (4), three triterpenes, lupeol, lupenone and taraxerone, and four sterols, beta-sitosterol, stigmasterol, stigmast-4-en-3-one and ergosta-4,6,8(14),22-tetraen-3-one were isolated from the n-hexane extract of the stems of Diospyros maritima Blume. The structural determination of 1 was based on 1D and 2D NMR spectra (including 1H-1H COSY, 1H-13C COSY, and HMBC). All compounds were evaluated for in vitro cytotoxicity in 4 cancer cell lines. Compound 2 showed similar cytotoxicity against hepatoma (HEPA-3B, ED50 = 1.72 micrograms/ml), nasopharynx carcinoma (KB, ED50 = 1.85 micrograms/ml), colon carcinoma (COLO-205, ED50 = 2.24 micrograms/ml) and cervical carcinoma (HELA, ED50 = 1.92 micrograms/ml). Compounds 3 and 4 exhibited strong cytotoxicity against HEPA-3B, KB, COLO-205 and HELA (ED50 = 0.25, 1.81, 0.13 and 0.27 micrograms/ml for 3; ED50 = 0.87, 3.27, 0.56 and 0.35 micrograms/ml for 4, respectively.